

**Dominion Exploration & Production, Inc.**  
**P.O. 1360**  
**Roosevelt, UT 84066**

August 7, 2003

Utah Division of Oil, Gas, & Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, UT 84114-5801

RE: APPLICATION FOR PERMIT TO DRILL  
HILL CREEK UNIT 4-34F  
NE/NW, SEC. 34, T10S, R20E  
UINTAH COUNTY, UTAH  
LEASE NO.: U-28203  
UTE INDIAN TRIBAL LANDS

Enclosed please find a copy of the Application for Permit to Drill and associated attachments for the above-referenced well.

All further communication regarding the permit for this well, including the 7-day letter, communication regarding approval, and the approved APD should be directed to:

Ed Trotter, Agent  
P.O. Box 1910  
Vernal, UT 84078  
Phone: (435)789-4120  
Fax: (435)789-1420

Sincerely



Ed Trotter  
Agent

**Dominion Exploration & Production, Inc.**

Attachments

UDOGM

**RECEIVED**

**AUG 11 2003**

**DIV. OF OIL, GAS & MINING**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

001

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. U-28203
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE		6. If Indian, Allottee or Tribe Name Ute Indian Tribe
2. Name of Operator Dominion Exploration & Production, Inc.		7. If Unit or CA Agreement, Name and No. Hill Creek Unit
3a. Address 14000 Quail Spgs Parkway, Okla. City, OK 73134		8. Lease Name and Well No. HCU 4-34F
3b. Phone No. (include area code) 405-749-1300		9. API Number 43-047-35138
4. Location of Well (Report location clearly and in accordance with any state requirements. *) At surface 4418378Y 39.90957 564' FNL & 1771' FWL, NE/NW 4418336Y At proposed prod. zone 615102 X -109.65340 614766X 700' FNL & 650' FWL, NW/NW 39.90923 -109.65740		10. Field and Pool, or Exploratory Natural Buttes
14. Distance in miles and direction from nearest town or post office* 15.8 miles South of Ouray		11. Sec., T., R., M., or Blk and Survey or Area 34-10S-20E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 700'	16. No. of Acres in lease 1880	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1110'	19. Proposed Depth 8,000	20. BLM/BIA Bond No. on file 76S 63050 0330
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5229' GL	22. Approximate date work will start* 15-Feb-04	23. Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Carla Christian</i>	Name (Printed/Typed) Carla Christian	Date August 7, 2003
Title Regulatory Specialist		
Approved by (Signature) <i>Bradley G. Hill</i>	Name (Printed/Typed) BRADLEY G. HILL	Date 08-16-03
Title Environmental Scientist III	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

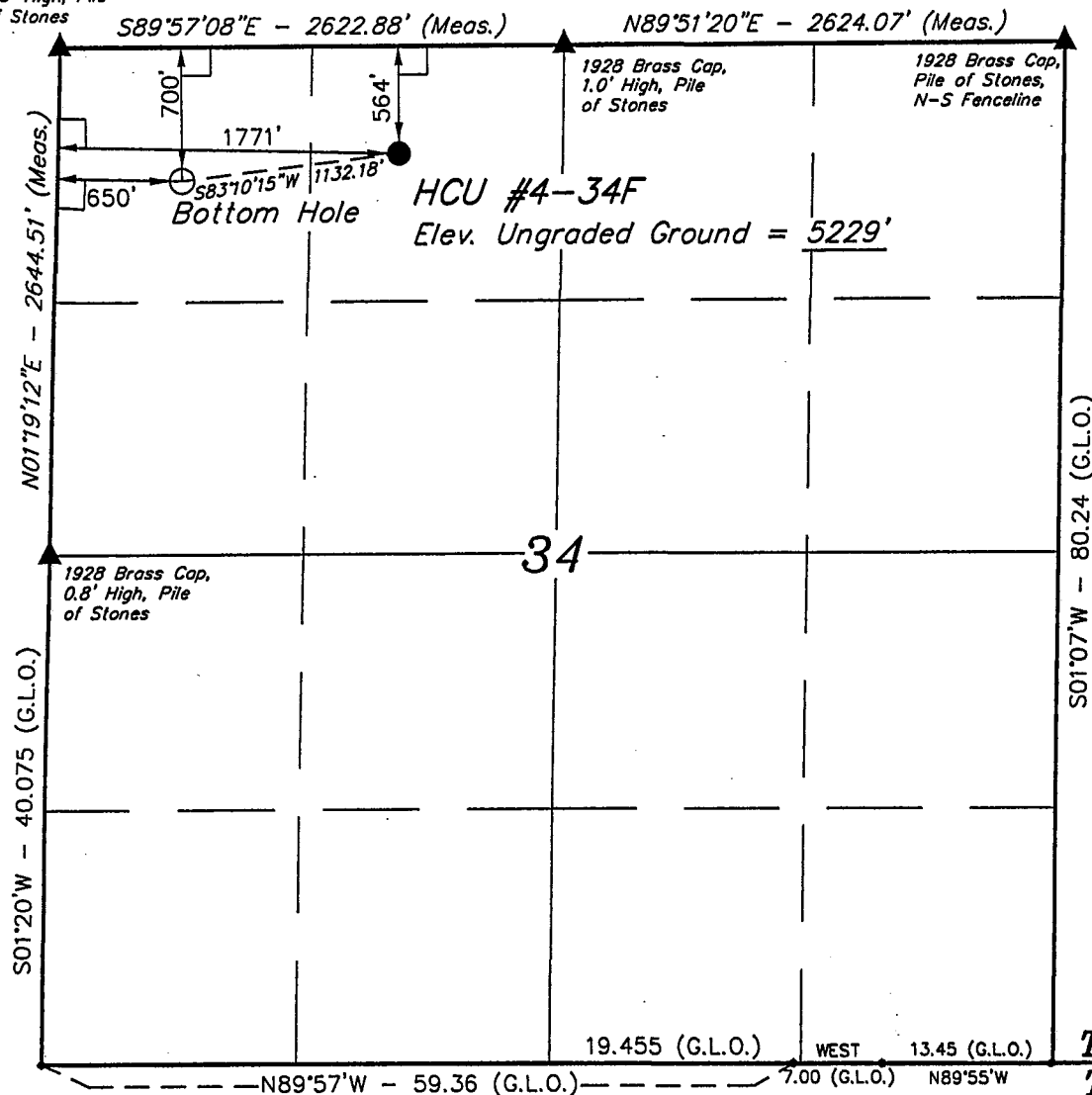
Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

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AUG 11 2003  
DIV. OF OIL, GAS & MINING

**T10S, R20E, S.L.B.&M.**

1928 Brass Cap,  
0.8' High, Pile  
of Stones



**LEGEND:**

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)  
LATITUDE = 39°54'34.55" (39.909597)  
LONGITUDE = 109°39'14.48" (109.654022)

**DOMINION EXPLR. & PROD., INC.**

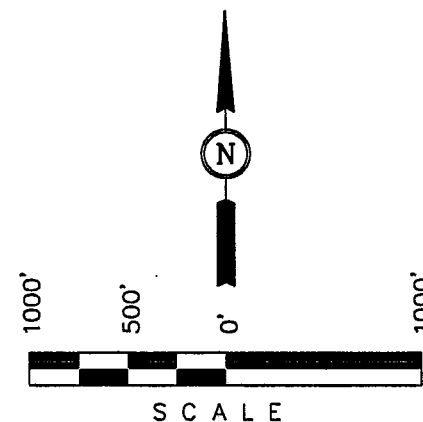
Well location, HCU #4-34F, located as shown in the NE 1/4 NW 1/4 of Section 34, T10S, R20E, S.L.B.&M. Uintah County, Utah.

**BASIS OF ELEVATION**

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 20, T10S, R20E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN. NW QUADRANGLE, UTAH, UTAH COUNTY 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5251 FEET.

**BASIS OF BEARINGS**

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Robert H. Hays*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 4-30-03	DATE DRAWN: 5-5-03
PARTY K.K. M.P. C.G.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE DOMINION EXPLR. & PROD., INC.	

Dominion Exploration & Production, Inc.  
14000 Quail Springs Parkway, #600, Oklahoma City, OK 73134-2600



Attn: Diana Mason  
Utah Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

Reference: Exception to Location & Sitting of Well  
HCU 4-34F, Surface Location 564' FNL & 1771' FWL, Sec. 34-10S-20E  
Bottom Location 700' FNL & 650' FWL, Sec. 34-10S-20E  
Uintah County, Utah

Dear Ms. Mason:

Dominion Exploration & Production, Inc. is requesting an exception to Rule 649-3-11, for the above referenced well, due to the directional drilling. Dominion Exploration & Production, Inc. is the only owner within a 460' radius from all points along the intended well bore.

If you should require additional information please feel free to contact me at (405) 749-5263.

Sincerely,

Dominion Exploration & Production, Inc.



Carla Christian  
Regulatory Specialist

Enclosure

DRILLING PLANAPPROVAL OF OPERATIONS

## Attachment for Permit to Drill

**Name of Operator:** Dominion Exploration & Production  
**Address:** 14000 Quail Springs Parkway, Suite 600  
 Oklahoma City, OK 73134  
**Well Location:** HCU 4-34F  
 SHL: 564' FNL & 1771' FWL Section 34-10S-20E  
 BHL: 700' FNL & 650' FWL Section 34-10S-20E  
 Uintah County, UT

1. GEOLOGIC SURFACE FORMATION Uintah2. ESTIMATED DEPTHS OF IMPORTANT GEOLOGIC MARKERS

<u>Formation</u>	<u>Depth</u>
Green River	883'
Wasatch Tongue	3,793'
Green River Tongue	4,123'
Wasatch	4,283'
Chapita Wells	5,303'
Uteland Buttes	6,383'
Mesaverde	7,483'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS

<u>Formation</u>	<u>Depth</u>	<u>Type</u>
Green River	883'	Oil
Wasatch Tongue	3,793'	Oil
Green River Tongue	4,123'	Oil
Wasatch	4,283'	Gas
Chapita Wells	5,303'	Gas
Uteland Buttes	6,383'	Gas
Mesaverde	7,483	Gas

4. PROPOSED CASING PROGRAM

All casing used to drill this well will be new casing.

<u>Type</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Conn.</u>	<u>Top</u>	<u>Bottom</u>	<u>Hole</u>
Surface	13-3/8"	48.0 ppf	H-40	STC	0'	500'	17-1/2"
Intermediate	9-5/8"	36.0 ppf	J-55	LTC	0'	2,800'	12-1/4"
Production	5-1/2"	17.0 ppf	MAV-80	LTC	0'	8,000'	7-7/8"

5. OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Surface hole: No BOPE will be utilized.

Intermediate hole: To be drilled using a diverter stack with rotating head to divert flow from rig floor.

Production hole: Prior to drilling out the intermediate casing shoe, 3,000 psi or greater BOP equipment will be installed. The pipe rams will be operated at least once per day from intermediate casing to total depth. The blind rams will be tested once per day from intermediate casing to total depth if operations permit.

## DRILLING PLAN

### APPROVAL OF OPERATIONS

A diagram of the planned BOP equipment for normal drilling operations in this area is attached. As denoted there will be two valves and one check valve on the kill line, two valves on the choke line, and two adjustable chokes on the manifold system. The BOP "stack" will consist of two BOP rams (1 pipe, 1 blind) and one annular type preventer, all rated to a minimum of 3,000 psi working pressure.

The BOP equipment will be pressure tested prior to drilling below the intermediate casing shoe. All test pressures will be maintained for fifteen (15) minutes without any significant pressure decrease. Clear water will be circulated into the BOP stack and lines prior to pressure testing. The following test pressures will be used as a minimum for various equipment items.

1.	Annular BOP	1,500 psi
2.	Ram type BOP	3,000 psi
3.	Kill line valves	3,000 psi
4.	Choke line valves and choke manifold valves	3,000 psi
5.	Chokes	3,000 psi
6.	Casing, casinghead & weld	1,500 psi
7.	Upper kelly cock and safety valve	3,000 psi
8.	Dart valve	3,000 psi

#### 6. MUD SYSTEMS

- An air or an air/mist system may be used to drill to the surface hole until water influx becomes too great.
- KCL mud system will be used to drill well.

<u>Depths</u>	<u>Mud Weight (ppg)</u>	<u>Mud System</u>
0' - 500'	8.4	Air foam mist, no pressure control
500' - 2,800'	8.6	Fresh water, rotating head and diverter
2,800' - 8,000'	8.6	Fresh water/2% KCL/KCL mud system

#### 7. BLOOIE LINE

- An automatic igniter will not be installed on blooie line. The blooie will have a constant ignition source.
- A "target tee" connection will be installed on blooie line for 90° change of directions for abrasion resistance.
- "Target tee" connections will be a minimum of 50' from wellhead.
- The blooie line discharge will be a minimum of 100' from the wellhead.

#### 8. AUXILIARY EQUIPMENT TO BE USED

- a. Kelly cock.
- b. Full opening valve with drill pipe connection will be kept on floor. Valve will be used when the kelly is not in string.

#### 9. TESTING, LOGGING, AND CORING PROGRAMS TO BE FOLLOWED

- A drillstem test in the Wasatch Tongue is possible.
- One electric line wire-log will be run from total depth to intermediate casing.
- The gamma ray will be left on to record from total depth to intermediate casing.
- Other log curves (resistivities, porosity, and caliper) will record from total depth to intermediate casing.
- A dipmeter, percussion cores, or rotary cores may be run over selected intervals.

#### 10. ANTICIPATED ABNORMAL PRESSURES OR TEMPERATURES EXPECTED

- Expected BHP 1,500-2,000 psi (lower than normal pressure gradient).
- No abnormal temperature or pressures are anticipated.
- The formations to be penetrated do not contain known H<sub>2</sub>S gas.

#### 11. WATER SUPPLY

- No water pipelines will be laid for this well.
- No water well will be drilled for this well.
- Drilling water for this well will be hauled on the road(s) shown in Attachment No. 3.
- Water will be hauled from: Water Permit # 43-10447 Section 9, Township 8 South, Range 20 East

## DRILLING PLAN

### APPROVAL OF OPERATIONS

#### 12. CEMENT SYSTEMS

##### a. Surface Cement:

Drill 17-1/2" hole to 500' and cement 13-3/8" to surface with 450 sks class "C" cement with 2% CaCl<sub>2</sub> and 1/4 #/sk. Poly-E-Flakes (volume includes 40% excess). Top out if necessary with Top Out cement listed below.

##### b. Intermediate Casing Cement:

- Drill 12-1/4" hole to 2,800'±, run and cement 9-5/8" to surface.
- Pump 20 bbls lightly weighted water spacer followed by 5 bbls fresh water. Displace with any available water.
- Casing to be run with: a) guide shoe b) insert float c) three (3) centralizers, one on each of first 3 joints d) stop ring for plug two joints off bottom e) bottom three joints thread locked f) pump job with bottom plug only.
- Cement to surface not required due to surface casing set deeper than normal.

Type	Sacks	Interval	Density	Yield	Hole Volume	Cement Volume	Excess
Lead	300	0'-2,000'	11.0 ppg	3.82 CFS	658 CF	1,152 CF	75%
Tail	390	2,000'-2,800'	15.6 ppg	1.20 CFS	268 CF	469 CF	75%

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 3.82 cf/sack Slurry weight: 11.00 #/gal.  
Water requirement: 22.95 gal/sack  
Compressives @ 130°F: 157 psi after 24 hours

Tail Mix: Class "G" Cement, 1/4 lb/sk Cellophane Flakes + 2% bwoc Calcium Chloride + 44.3% fresh water.  
Pump Time: 1 hr. 5 min. @ 90 °F.  
Compressives @ 95 °F: 24 Hour is 4,700 psi

##### c. Production Casing Cement:

- Drill 7-7/8" hole to 8,000'±, run and cement 5 1/2".
- Cement interface is at 3,700', which is typically 500'-1,000' above shallowest pay.
- Pump 20 bbl Mud Clean II unweighted spacer, followed by 20 Bbls fresh H2O spacer.
- Displace with 3% KCL.

Type	Sacks	Interval	Density	Yield	Hole Volume	Cement Volume	Excess
Lead	90	3,700'-4,500'	11.5 ppg	3.12 CFS	139 CF	277 CF	100%
Tail	600	4,500'-8,000'	13.0 ppg	1.75 CFS	525 CF	1050 CF	100%

Note: Caliper will be run to determine exact cement volume.

Lead Mix: Halliburton Prem Plus V blend. Blend includes Class "C" cement, gel, salt, gilsonite, EX-1 and HR-7.  
Slurry yield: 3.12 cf/sack Slurry weight: 11.60 #/gal.  
Water requirement: 17.71 gal/sack  
Compressives @ 130°F: 157 psi after 24 hours

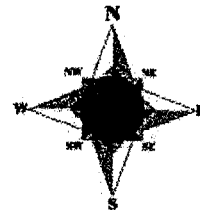
Tail Mix: Halliburton HLC blend (Prem Plus V/JB flyash). Blend includes Class "G" cement, KCl, EX-1, Halad 322, & HR-5.  
Slurry yield: 1.75 cf/sack Slurry weight: 13.00 #/gal.  
Water requirement: 9.09 gal/sack  
Compressives @ 165°F: 905 psi after 24 hours

#### 13. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

Starting Date: February 15, 2004

Duration: 14 Days

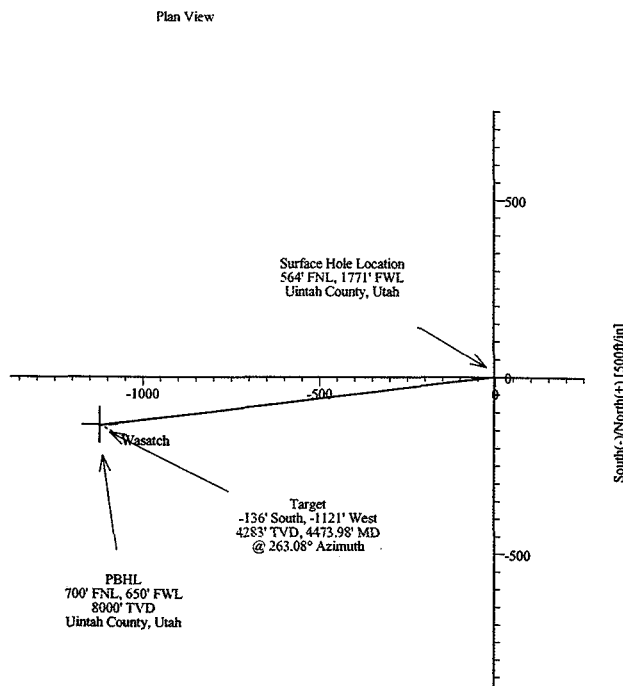
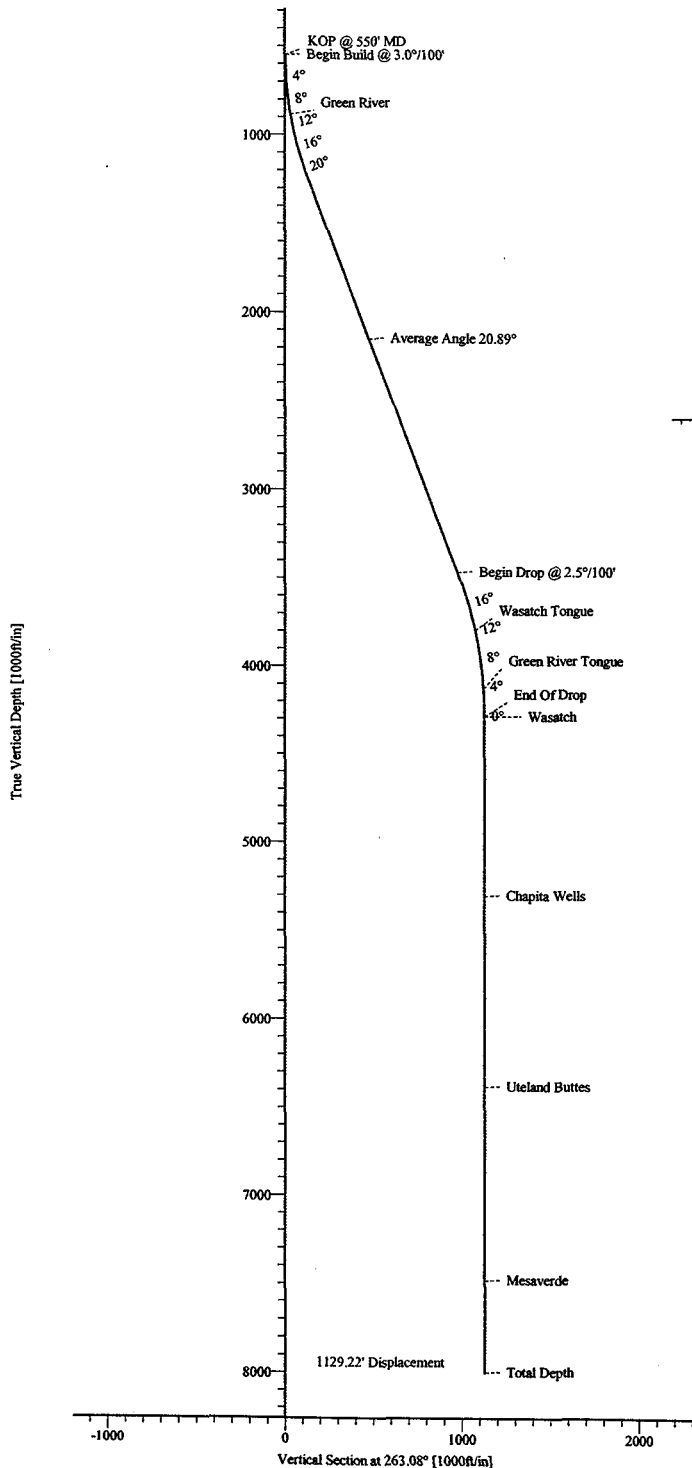
*Dominion Exploration & Production*  
*HCU #4-34F*  
*Hill Creek Unit*  
*Uintah/Utah*



Declination 12.09°  
 Dip Angle 66.23°  
 Field Strength 53338 nT

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	550.00	0.00	263.08	550.00	0.00	0.00	0.00	0.00	0.00	
2	1246.40	20.89	263.08	1231.07	-15.12	-124.65	3.00	0.00	125.57	
3	3638.30	20.89	263.08	3465.71	-117.85	-971.42	0.00	0.00	978.54	
4	4473.98	0.00	0.00	4283.00	-136.00	-1121.00	2.50	180.00	1129.22	Wasatch
5	8190.98	0.00	0.00	8000.00	-136.00	-1121.00	0.00	0.00	1129.22	



West(-)/East(+) [500ft/in]

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Wasatch	4283.00	-136.00	-1121.00	Point

**QUANTUM**  
 DRILLING MOTORS  
 & DIRECTIONAL SERVICES

Plan: Plan #1 (HCU #4-34F/Original Well)

Created By: Jeff Shoop Date: 7/30/2003  
 Checked: \_\_\_\_\_ Date: \_\_\_\_\_  
 Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_  
 Approved: \_\_\_\_\_ Date: \_\_\_\_\_



# Quantum Drilling Motors

## Planning Report

<b>Company:</b> Dominion Exploration & Product <b>Field:</b> Field #1 <b>Site:</b> Hill Creek Unit Site #2 <b>Well:</b> HCU #4-34F <b>Wellpath:</b> Original Well		<b>Date:</b> 7/30/2003 <b>Co-ordinate(NE) Reference:</b> Site: Hill Creek Unit Site #2, True Nort <b>Vertical (TVD) Reference:</b> SITE 0.0 <b>Section (VS) Reference:</b> User (0.00N,0.00E,263.08Azi) <b>Plan:</b> Plan #1		<b>Time:</b> 09:48:07 <b>Page:</b> 1
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<b>Field:</b> Field #1	
<b>Map System:</b> US State Plane Coordinate System 1983 <b>Geo Datum:</b> GRS 1980 <b>Sys Datum:</b> Mean Sea Level	
<b>Map Zone:</b> Utah, Central Zone <b>Coordinate System:</b> Site Centre <b>Geomagnetic Model:</b> igrf2000	

<b>Site:</b> Hill Creek Unit Site #2	
<b>Site Position:</b> <b>From:</b> Lease Line <b>Position Uncertainty:</b> 0.00 ft <b>Ground Level:</b> 0.00 ft	<b>Northing:</b> ft <b>Easting:</b> ft <b>Latitude:</b> <b>Longitude:</b> <b>North Reference:</b> True <b>Grid Convergence:</b> 0.00 deg

<b>Well:</b> HCU #4-34F		<b>Slot Name:</b>
<b>Well Position:</b> +N/-S 0.00 ft +E/-W 0.00 ft <b>Position Uncertainty:</b> 0.00 ft	<b>Northing:</b> 0.00 ft <b>Easting:</b> 0.00 ft	<b>Latitude:</b> 20 31 27.661 N <b>Longitude:</b> 116 2 57.116 W

<b>Wellpath:</b> Original Well		<b>Drilled From:</b> Surface <b>Tie-on Depth:</b> 0.00 ft <b>Above System Datum:</b> Mean Sea Level <b>Declination:</b> 0.00 deg <b>Mag Dip Angle:</b> 0.00 deg
<b>Current Datum:</b> SITE <b>Magnetic Data:</b> 7/30/2003 <b>Field Strength:</b> 0 nT <b>Vertical Section:</b> Depth From (TVD) ft	<b>Height:</b> 0.00 ft +N/-S ft +E/-W ft	<b>Direction:</b> deg
4283.00	0.00	263.08

Plan Section Information										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
550.00	0.00	263.08	550.00	0.00	0.00	0.00	0.00	0.00	0.00	
1246.40	20.89	263.08	1231.07	-15.12	-124.65	3.00	3.00	0.00	0.00	
3638.30	20.89	263.08	3465.71	-117.85	-971.42	0.00	0.00	0.00	0.00	
4473.98	0.00	0.00	4283.00	-136.00	-1121.00	2.50	-2.50	0.00	180.00	Wasatch
8190.98	0.00	0.00	8000.00	-136.00	-1121.00	0.00	0.00	0.00	0.00	

Survey										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
550.00	0.00	263.08	550.00	0.00	0.00	0.00	0.00	0.00	0.00	Begin Build @ 3.0"/100'
570.00	0.60	263.08	570.00	-0.01	-0.10	0.10	3.00	3.00	0.00	
600.00	1.50	263.08	599.99	-0.08	-0.65	0.65	3.00	3.00	0.00	
630.00	2.40	263.08	629.98	-0.20	-1.66	1.68	3.00	3.00	0.00	
660.00	3.30	263.08	659.94	-0.38	-3.14	3.17	3.00	3.00	0.00	
690.00	4.20	263.08	689.87	-0.62	-5.09	5.13	3.00	3.00	0.00	
720.00	5.10	263.08	719.78	-0.91	-7.51	7.56	3.00	3.00	0.00	
750.00	6.00	263.08	749.63	-1.26	-10.39	10.46	3.00	3.00	0.00	
780.00	6.90	263.08	779.44	-1.67	-13.73	13.83	3.00	3.00	0.00	
810.00	7.80	263.08	809.20	-2.13	-17.54	17.67	3.00	3.00	0.00	
840.00	8.70	263.08	838.89	-2.65	-21.82	21.98	3.00	3.00	0.00	
870.00	9.60	263.08	868.50	-3.22	-26.55	26.75	3.00	3.00	0.00	
884.71	10.04	263.08	883.00	-3.52	-29.04	29.25	3.00	3.00	0.00	Green River
900.00	10.50	263.08	898.04	-3.85	-31.75	31.98	3.00	3.00	0.00	
930.00	11.40	263.08	927.50	-4.54	-37.41	37.68	3.00	3.00	0.00	
960.00	12.30	263.08	956.86	-5.28	-43.52	43.84	3.00	3.00	0.00	
990.00	13.20	263.08	986.12	-6.08	-50.09	50.46	3.00	3.00	0.00	
1020.00	14.10	263.08	1015.27	-6.93	-57.12	57.54	3.00	3.00	0.00	
1050.00	15.00	263.08	1044.31	-7.84	-64.60	65.08	3.00	3.00	0.00	
1080.00	15.90	263.08	1073.22	-8.80	-72.54	73.07	3.00	3.00	0.00	

# Quantum Drilling Motors

## Planning Report

**Company:** Dominion Exploration & Product  
**Field:** Field #1  
**Site:** Hill Creek Unit Site #2  
**Well:** HCU #4-34F  
**Wellpath:** Original Well

**Date:** 7/30/2003 **Time:** 09:48:07 **Page:** 2  
**Co-ordinate(NE) Reference:** Site: Hill Creek Unit Site #2, True North  
**Vertical (TVD) Reference:** SITE 0.0  
**Section (VS) Reference:** User (0.00N,0.00E,263.08Azi)  
**Plan:** Plan #1

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1110.00	16.80	263.08	1102.01	-9.82	-80.92	81.51	3.00	3.00	0.00	
1140.00	17.70	263.08	1130.66	-10.89	-89.75	90.41	3.00	3.00	0.00	
1170.00	18.60	263.08	1159.17	-12.01	-99.03	99.75	3.00	3.00	0.00	
1200.00	19.50	263.08	1187.52	-13.19	-108.75	109.55	3.00	3.00	0.00	
1230.00	20.40	263.08	1215.72	-14.43	-118.91	119.78	3.00	3.00	0.00	
1246.40	20.89	263.08	1231.07	-15.12	-124.65	125.57	3.00	3.00	0.00	
1260.00	20.89	263.08	1243.78	-15.71	-129.47	130.41	0.00	0.00	0.00	
1290.00	20.89	263.08	1271.80	-17.00	-140.09	141.11	0.00	0.00	0.00	
1320.00	20.89	263.08	1299.83	-18.28	-150.71	151.81	0.00	0.00	0.00	
1350.00	20.89	263.08	1327.86	-19.57	-161.33	162.51	0.00	0.00	0.00	
1380.00	20.89	263.08	1355.89	-20.86	-171.95	173.21	0.00	0.00	0.00	
1410.00	20.89	263.08	1383.91	-22.15	-182.57	183.91	0.00	0.00	0.00	
1440.00	20.89	263.08	1411.94	-23.44	-193.19	194.60	0.00	0.00	0.00	
1470.00	20.89	263.08	1439.97	-24.73	-203.81	205.30	0.00	0.00	0.00	
1500.00	20.89	263.08	1468.00	-26.01	-214.43	216.00	0.00	0.00	0.00	
1530.00	20.89	263.08	1496.02	-27.30	-225.05	226.70	0.00	0.00	0.00	
1560.00	20.89	263.08	1524.05	-28.59	-235.67	237.40	0.00	0.00	0.00	
1590.00	20.89	263.08	1552.08	-29.88	-246.29	248.10	0.00	0.00	0.00	
1620.00	20.89	263.08	1580.11	-31.17	-256.91	258.79	0.00	0.00	0.00	
1650.00	20.89	263.08	1608.13	-32.46	-267.53	269.49	0.00	0.00	0.00	
1680.00	20.89	263.08	1636.16	-33.75	-278.15	280.19	0.00	0.00	0.00	
1710.00	20.89	263.08	1664.19	-35.03	-288.77	290.89	0.00	0.00	0.00	
1740.00	20.89	263.08	1692.22	-36.32	-299.39	301.59	0.00	0.00	0.00	
1770.00	20.89	263.08	1720.25	-37.61	-310.01	312.29	0.00	0.00	0.00	
1800.00	20.89	263.08	1748.27	-38.90	-320.63	322.98	0.00	0.00	0.00	
1830.00	20.89	263.08	1776.30	-40.19	-331.25	333.68	0.00	0.00	0.00	
1860.00	20.89	263.08	1804.33	-41.48	-341.87	344.38	0.00	0.00	0.00	
1890.00	20.89	263.08	1832.36	-42.76	-352.49	355.08	0.00	0.00	0.00	
1920.00	20.89	263.08	1860.38	-44.05	-363.11	365.78	0.00	0.00	0.00	
1950.00	20.89	263.08	1888.41	-45.34	-373.74	376.48	0.00	0.00	0.00	
1980.00	20.89	263.08	1916.44	-46.63	-384.36	387.17	0.00	0.00	0.00	
2010.00	20.89	263.08	1944.47	-47.92	-394.98	397.87	0.00	0.00	0.00	
2040.00	20.89	263.08	1972.49	-49.21	-405.60	408.57	0.00	0.00	0.00	
2070.00	20.89	263.08	2000.52	-50.50	-416.22	419.27	0.00	0.00	0.00	
2100.00	20.89	263.08	2028.55	-51.78	-426.84	429.97	0.00	0.00	0.00	
2130.00	20.89	263.08	2056.58	-53.07	-437.46	440.67	0.00	0.00	0.00	
2160.00	20.89	263.08	2084.60	-54.36	-448.08	451.36	0.00	0.00	0.00	
2190.00	20.89	263.08	2112.63	-55.65	-458.70	462.06	0.00	0.00	0.00	
2220.00	20.89	263.08	2140.66	-56.94	-469.32	472.76	0.00	0.00	0.00	
2230.00	20.89	263.08	2150.00	-57.37	-472.86	476.33	0.00	0.00	0.00	Average Angle 20.89°
2250.00	20.89	263.08	2168.69	-58.23	-479.94	483.46	0.00	0.00	0.00	
2280.00	20.89	263.08	2196.71	-59.51	-490.56	494.16	0.00	0.00	0.00	
2310.00	20.89	263.08	2224.74	-60.80	-501.18	504.86	0.00	0.00	0.00	
2340.00	20.89	263.08	2252.77	-62.09	-511.80	515.55	0.00	0.00	0.00	
2370.00	20.89	263.08	2280.80	-63.38	-522.42	526.25	0.00	0.00	0.00	
2400.00	20.89	263.08	2308.83	-64.67	-533.04	536.95	0.00	0.00	0.00	
2430.00	20.89	263.08	2336.85	-65.96	-543.66	547.65	0.00	0.00	0.00	
2460.00	20.89	263.08	2364.88	-67.25	-554.28	558.35	0.00	0.00	0.00	
2490.00	20.89	263.08	2392.91	-68.53	-564.90	569.04	0.00	0.00	0.00	
2520.00	20.89	263.08	2420.94	-69.82	-575.52	579.74	0.00	0.00	0.00	
2550.00	20.89	263.08	2448.96	-71.11	-586.14	590.44	0.00	0.00	0.00	
2580.00	20.89	263.08	2476.99	-72.40	-596.76	601.14	0.00	0.00	0.00	
2610.00	20.89	263.08	2505.02	-73.69	-607.38	611.84	0.00	0.00	0.00	

# Quantum Drilling Motors

## Planning Report

**Company:** Dominion Exploration & Product  
**Field:** Field #1  
**Site:** Hill Creek Unit Site #2  
**Well:** HCU #4-34F  
**Wellpath:** Original Well

**Date:** 7/30/2003 **Time:** 09:48:07 **Page:** 3  
**Co-ordinate(NE) Reference:** Site: Hill Creek Unit Site #2, True Nort  
**Vertical (TVD) Reference:** SITE 0.0  
**Section (VS) Reference:** User (0.00N,0.00E,263.08Azi)  
**Plan:** Plan #1

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2640.00	20.89	263.08	2533.05	-74.98	-618.00	622.54	0.00	0.00	0.00	
2670.00	20.89	263.08	2561.07	-76.26	-628.63	633.23	0.00	0.00	0.00	
2700.00	20.89	263.08	2589.10	-77.55	-639.25	643.93	0.00	0.00	0.00	
2730.00	20.89	263.08	2617.13	-78.84	-649.87	654.63	0.00	0.00	0.00	
2760.00	20.89	263.08	2645.16	-80.13	-660.49	665.33	0.00	0.00	0.00	
2790.00	20.89	263.08	2673.18	-81.42	-671.11	676.03	0.00	0.00	0.00	
2820.00	20.89	263.08	2701.21	-82.71	-681.73	686.73	0.00	0.00	0.00	
2850.00	20.89	263.08	2729.24	-84.00	-692.35	697.42	0.00	0.00	0.00	
2880.00	20.89	263.08	2757.27	-85.28	-702.97	708.12	0.00	0.00	0.00	
2910.00	20.89	263.08	2785.29	-86.57	-713.59	718.82	0.00	0.00	0.00	
2940.00	20.89	263.08	2813.32	-87.86	-724.21	729.52	0.00	0.00	0.00	
2970.00	20.89	263.08	2841.35	-89.15	-734.83	740.22	0.00	0.00	0.00	
3000.00	20.89	263.08	2869.38	-90.44	-745.45	750.92	0.00	0.00	0.00	
3030.00	20.89	263.08	2897.40	-91.73	-756.07	761.61	0.00	0.00	0.00	
3060.00	20.89	263.08	2925.43	-93.02	-766.69	772.31	0.00	0.00	0.00	
3090.00	20.89	263.08	2953.46	-94.30	-777.31	783.01	0.00	0.00	0.00	
3120.00	20.89	263.08	2981.49	-95.59	-787.93	793.71	0.00	0.00	0.00	
3150.00	20.89	263.08	3009.52	-96.88	-798.55	804.41	0.00	0.00	0.00	
3180.00	20.89	263.08	3037.54	-98.17	-809.17	815.11	0.00	0.00	0.00	
3210.00	20.89	263.08	3065.57	-99.46	-819.79	825.80	0.00	0.00	0.00	
3240.00	20.89	263.08	3093.60	-100.75	-830.41	836.50	0.00	0.00	0.00	
3270.00	20.89	263.08	3121.63	-102.03	-841.03	847.20	0.00	0.00	0.00	
3300.00	20.89	263.08	3149.65	-103.32	-851.65	857.90	0.00	0.00	0.00	
3330.00	20.89	263.08	3177.68	-104.61	-862.27	868.60	0.00	0.00	0.00	
3360.00	20.89	263.08	3205.71	-105.90	-872.89	879.30	0.00	0.00	0.00	
3390.00	20.89	263.08	3233.74	-107.19	-883.52	889.99	0.00	0.00	0.00	
3420.00	20.89	263.08	3261.76	-108.48	-894.14	900.69	0.00	0.00	0.00	
3450.00	20.89	263.08	3289.79	-109.77	-904.76	911.39	0.00	0.00	0.00	
3480.00	20.89	263.08	3317.82	-111.05	-915.38	922.09	0.00	0.00	0.00	
3510.00	20.89	263.08	3345.85	-112.34	-926.00	932.79	0.00	0.00	0.00	
3540.00	20.89	263.08	3373.87	-113.63	-936.62	943.49	0.00	0.00	0.00	
3570.00	20.89	263.08	3401.90	-114.92	-947.24	954.18	0.00	0.00	0.00	
3600.00	20.89	263.08	3429.93	-116.21	-957.86	964.88	0.00	0.00	0.00	
3630.00	20.89	263.08	3457.96	-117.50	-968.48	975.58	0.00	0.00	0.00	
3638.30	20.89	263.08	3465.71	-117.85	-971.42	978.54	0.00	0.00	0.00	
3660.00	20.35	263.08	3486.02	-118.77	-979.00	986.18	2.50	-2.50	0.00	Begin Drop @ 2.5°/100'
3690.00	19.60	263.08	3514.22	-120.01	-989.18	996.43	2.50	-2.50	0.00	
3720.00	18.85	263.08	3542.54	-121.20	-998.98	1006.31	2.50	-2.50	0.00	
3750.00	18.10	263.08	3571.00	-122.34	-1008.42	1015.81	2.50	-2.50	0.00	
3780.00	17.35	263.08	3599.57	-123.44	-1017.49	1024.95	2.50	-2.50	0.00	
3810.00	16.60	263.08	3628.26	-124.50	-1026.18	1033.71	2.50	-2.50	0.00	
3840.00	15.85	263.08	3657.07	-125.51	-1034.50	1042.09	2.50	-2.50	0.00	
3870.00	15.10	263.08	3685.98	-126.47	-1042.45	1050.09	2.50	-2.50	0.00	
3900.00	14.35	263.08	3715.00	-127.39	-1050.02	1057.72	2.50	-2.50	0.00	
3930.00	13.60	263.08	3744.11	-128.26	-1057.21	1064.96	2.50	-2.50	0.00	
3960.00	12.85	263.08	3773.31	-129.09	-1064.02	1071.83	2.50	-2.50	0.00	
3980.17	12.35	263.08	3793.00	-129.62	-1068.39	1076.23	2.50	-2.50	0.00	Wasatch Tongue
3990.00	12.10	263.08	3802.60	-129.87	-1070.46	1078.31	2.50	-2.50	0.00	
4020.00	11.35	263.08	3831.98	-130.60	-1076.51	1084.40	2.50	-2.50	0.00	
4050.00	10.60	263.08	3861.43	-131.29	-1082.18	1090.11	2.50	-2.50	0.00	
4080.00	9.85	263.08	3890.95	-131.93	-1087.46	1095.44	2.50	-2.50	0.00	
4110.00	9.10	263.08	3920.54	-132.53	-1092.37	1100.38	2.50	-2.50	0.00	
4140.00	8.35	263.08	3950.20	-133.07	-1096.88	1104.93	2.50	-2.50	0.00	

# Quantum Drilling Motors

## Planning Report

**Company:** Dominion Exploration & Product  
**Field:** Field #1  
**Site:** Hill Creek Unit Site #2  
**Well:** HCU #4-34F  
**Wellpath:** Original Well

**Date:** 7/30/2003 **Time:** 09:48:07 **Page:** 4  
**Co-ordinate(NE) Reference:** Site: Hill Creek Unit Site #2, True Nort  
**Vertical (TVD) Reference:** SITE 0.0  
**Section (VS) Reference:** User (0.00N,0.00E,263.08Azi)  
**Plan:** Plan #1

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
4170.00	7.60	263.08	3979.91	-133.58	-1101.02	1109.09	2.50	-2.50	0.00	
4200.00	6.85	263.08	4009.67	-134.03	-1104.76	1112.86	2.50	-2.50	0.00	
4230.00	6.10	263.08	4039.48	-134.44	-1108.12	1116.24	2.50	-2.50	0.00	
4260.00	5.35	263.08	4069.33	-134.80	-1111.09	1119.24	2.50	-2.50	0.00	
4290.00	4.60	263.08	4099.21	-135.11	-1113.67	1121.84	2.50	-2.50	0.00	
4313.85	4.00	263.08	4123.00	-135.33	-1115.45	1123.63	2.50	-2.50	0.00	Green River Tongue
4320.00	3.85	263.08	4129.13	-135.38	-1115.87	1124.05	2.50	-2.50	0.00	
4350.00	3.10	263.08	4159.08	-135.60	-1117.67	1125.87	2.50	-2.50	0.00	
4380.00	2.35	263.08	4189.04	-135.77	-1119.09	1127.29	2.50	-2.50	0.00	
4410.00	1.60	263.08	4219.02	-135.89	-1120.11	1128.33	2.50	-2.50	0.00	
4440.00	0.85	263.08	4249.02	-135.97	-1120.75	1128.97	2.50	-2.50	0.00	
4470.00	0.10	263.08	4279.02	-136.00	-1121.00	1129.22	2.50	-2.50	0.00	
4473.98	0.00	0.00	4283.00	-136.00	-1121.00	1129.22	2.50	-2.50	0.00	Wasatch
4500.00	0.00	0.00	4309.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4530.00	0.00	0.00	4339.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4560.00	0.00	0.00	4369.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4590.00	0.00	0.00	4399.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4620.00	0.00	0.00	4429.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4650.00	0.00	0.00	4459.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4680.00	0.00	0.00	4489.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4710.00	0.00	0.00	4519.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4740.00	0.00	0.00	4549.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4770.00	0.00	0.00	4579.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4800.00	0.00	0.00	4609.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4830.00	0.00	0.00	4639.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4860.00	0.00	0.00	4669.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4890.00	0.00	0.00	4699.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4920.00	0.00	0.00	4729.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4950.00	0.00	0.00	4759.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
4980.00	0.00	0.00	4789.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5010.00	0.00	0.00	4819.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5040.00	0.00	0.00	4849.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5070.00	0.00	0.00	4879.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5100.00	0.00	0.00	4909.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5130.00	0.00	0.00	4939.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5160.00	0.00	0.00	4969.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5190.00	0.00	0.00	4999.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5220.00	0.00	0.00	5029.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5250.00	0.00	0.00	5059.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5280.00	0.00	0.00	5089.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5310.00	0.00	0.00	5119.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5340.00	0.00	0.00	5149.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5370.00	0.00	0.00	5179.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5400.00	0.00	0.00	5209.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5430.00	0.00	0.00	5239.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5460.00	0.00	0.00	5269.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5490.00	0.00	0.00	5299.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5493.98	0.00	0.00	5303.00	-136.00	-1121.00	1129.22	0.00	0.00	0.00	Chapita Wells
5520.00	0.00	0.00	5329.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5550.00	0.00	0.00	5359.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5580.00	0.00	0.00	5389.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5610.00	0.00	0.00	5419.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5640.00	0.00	0.00	5449.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5670.00	0.00	0.00	5479.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	

# Quantum Drilling Motors

## Planning Report

**Company:** Dominion Exploration & Product  
**Field:** Field #1  
**Site:** Hill Creek Unit Site #2  
**Well:** HCU #4-34F  
**Wellpath:** Original Well

**Date:** 7/30/2003  
**Co-ordinate(NE) Reference:** Site: Hill Creek Unit Site #2, True Nort  
**Vertical (TVD) Reference:** SITE 0.0  
**Section (VS) Reference:** User (0.00N,0.00E,263.08Azi)  
**Plan:** Plan #1

**Page:** 5

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
5700.00	0.00	0.00	5509.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5730.00	0.00	0.00	5539.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5760.00	0.00	0.00	5569.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5790.00	0.00	0.00	5599.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5820.00	0.00	0.00	5629.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5850.00	0.00	0.00	5659.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5880.00	0.00	0.00	5689.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5910.00	0.00	0.00	5719.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5940.00	0.00	0.00	5749.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
5970.00	0.00	0.00	5779.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6000.00	0.00	0.00	5809.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6030.00	0.00	0.00	5839.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6060.00	0.00	0.00	5869.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6090.00	0.00	0.00	5899.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6120.00	0.00	0.00	5929.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6150.00	0.00	0.00	5959.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6180.00	0.00	0.00	5989.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6210.00	0.00	0.00	6019.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6240.00	0.00	0.00	6049.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6270.00	0.00	0.00	6079.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6300.00	0.00	0.00	6109.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6330.00	0.00	0.00	6139.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6360.00	0.00	0.00	6169.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6390.00	0.00	0.00	6199.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6420.00	0.00	0.00	6229.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6450.00	0.00	0.00	6259.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6480.00	0.00	0.00	6289.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6510.00	0.00	0.00	6319.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6540.00	0.00	0.00	6349.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6570.00	0.00	0.00	6379.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6573.98	0.00	0.00	6383.00	-136.00	-1121.00	1129.22	0.00	0.00	0.00	Uteland Buttes
6600.00	0.00	0.00	6409.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6630.00	0.00	0.00	6439.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6660.00	0.00	0.00	6469.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6690.00	0.00	0.00	6499.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6720.00	0.00	0.00	6529.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6750.00	0.00	0.00	6559.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6780.00	0.00	0.00	6589.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6810.00	0.00	0.00	6619.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6840.00	0.00	0.00	6649.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6870.00	0.00	0.00	6679.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6900.00	0.00	0.00	6709.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6930.00	0.00	0.00	6739.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6960.00	0.00	0.00	6769.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
6990.00	0.00	0.00	6799.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7020.00	0.00	0.00	6829.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7050.00	0.00	0.00	6859.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7080.00	0.00	0.00	6889.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7110.00	0.00	0.00	6919.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7140.00	0.00	0.00	6949.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7170.00	0.00	0.00	6979.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7200.00	0.00	0.00	7009.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7230.00	0.00	0.00	7039.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	

# Quantum Drilling Motors

## Planning Report

**Company:** Dominion Exploration & Product  
**Field:** Field #1  
**Site:** Hill Creek Unit Site #2  
**Well:** HCU #4-34F  
**Wellpath:** Original Well

**Date:** 7/30/2003 **Time:** 09:48:07 **Page:** 6  
**Co-ordinate(NE) Reference:** Site: Hill Creek Unit Site #2, True Nort  
**Vertical (TVD) Reference:** SITE 0.0  
**Section (VS) Reference:** User (0.00N,0.00E,263.08Azi)  
**Plan:** Plan #1

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
7260.00	0.00	0.00	7069.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7290.00	0.00	0.00	7099.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7320.00	0.00	0.00	7129.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7350.00	0.00	0.00	7159.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7380.00	0.00	0.00	7189.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7410.00	0.00	0.00	7219.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7440.00	0.00	0.00	7249.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7470.00	0.00	0.00	7279.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7500.00	0.00	0.00	7309.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7530.00	0.00	0.00	7339.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7560.00	0.00	0.00	7369.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7590.00	0.00	0.00	7399.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7620.00	0.00	0.00	7429.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7650.00	0.00	0.00	7459.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7673.98	0.00	0.00	7483.00	-136.00	-1121.00	1129.22	0.00	0.00	0.00	Mesaverde
7680.00	0.00	0.00	7489.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7710.00	0.00	0.00	7519.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7740.00	0.00	0.00	7549.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7770.00	0.00	0.00	7579.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7800.00	0.00	0.00	7609.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7830.00	0.00	0.00	7639.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7860.00	0.00	0.00	7669.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7890.00	0.00	0.00	7699.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7920.00	0.00	0.00	7729.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7950.00	0.00	0.00	7759.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
7980.00	0.00	0.00	7789.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
8010.00	0.00	0.00	7819.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
8040.00	0.00	0.00	7849.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
8070.00	0.00	0.00	7879.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
8100.00	0.00	0.00	7909.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
8130.00	0.00	0.00	7939.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
8160.00	0.00	0.00	7969.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	
8190.00	0.00	0.00	7999.02	-136.00	-1121.00	1129.22	0.00	0.00	0.00	

### Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec			← Longitude → Deg Min Sec		
Wasatch -Plan hit target		4283.00	-136.00	-1121.00	-78.83	-1126.46	20	31	26.382 N	116	3	8.303 W

### Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
884.71	883.00	Green River		0.00	0.00
3980.17	3793.00	Wasatch Tongue		0.00	0.00
4313.85	4123.00	Green River Tongue		0.00	0.00
4473.98	4283.00	Wasatch		0.00	0.00
5493.98	5303.00	Chapita Wells		0.00	0.00
6573.98	6383.00	Uteland Buttes		0.00	0.00
7673.98	7483.00	Mesaverde		0.00	0.00
8190.98	8000.00	Total Depth		0.00	0.00

# Quantum Drilling Motors

## Planning Report

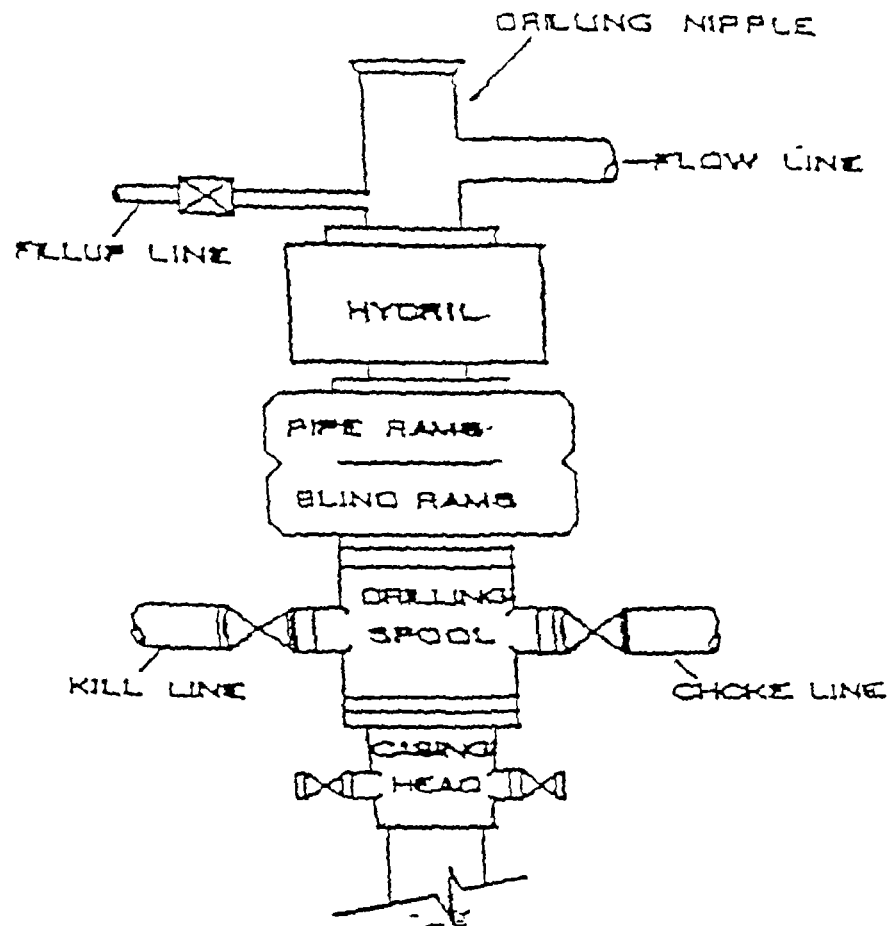
**Company:** Dominion Exploration & Product  
**Field:** Field #1  
**Site:** Hill Creek Unit Site #2  
**Well:** HCU #4-34F  
**Wellpath:** Original Well

**Date:** 7/30/2003      **Time:** 09:48:07      **Page:** 7  
**Co-ordinate(NE) Reference:** Site: Hill Creek Unit Site #2, True Nort  
**Vertical (TVD) Reference:** SITE 0.0  
**Section (VS) Reference:** User (0.00N,0.00E,263.08Azi)  
**Plan:** Plan #1

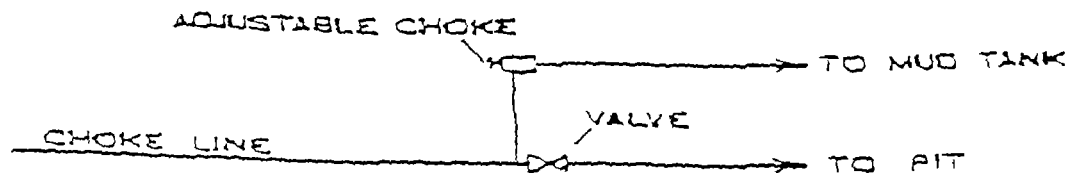
### Annotation

MD ft	TVD ft	
550.00	550.00	KOP @ 550' MD
550.00	550.00	Begin Build @ 3.0°/100'
2230.00	2150.00	Average Angle 20.89°
3638.30	3465.71	Begin Drop @ 2.5°/100'
4473.98	4283.00	End Of Drop
8190.98	8000.00	Total Depth

## BOP STACK



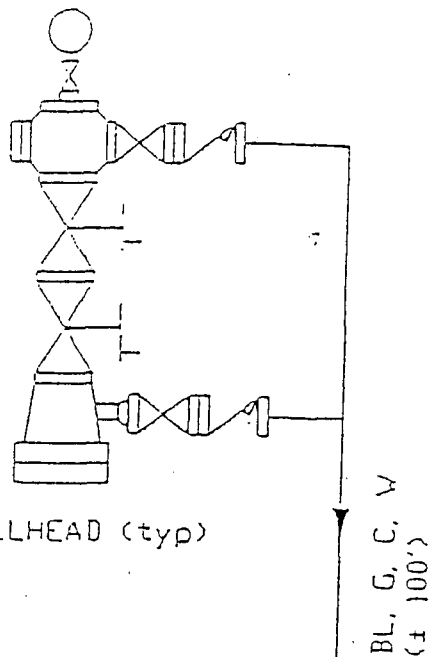
## CHOKE MANIFOLD



APPENDIX 11



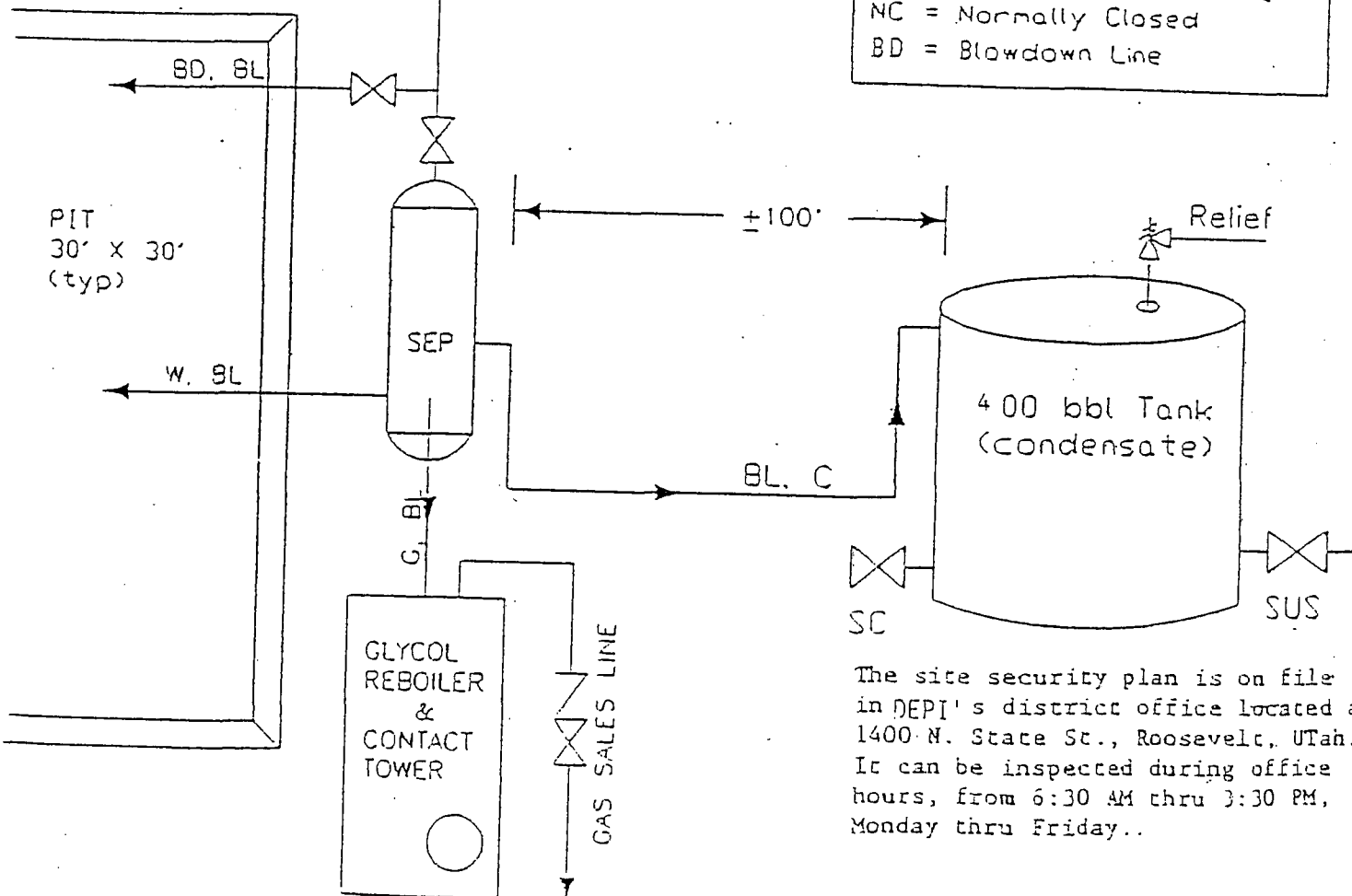
CONFIDENTIAL



WELLHEAD (typ)

LEGEND

- = Oil Line
- G = Gas Line
- W = Water Line
- R = Relief Line (Pressure)
- C = Condensate Line
- V = Vent Line
- D = Drain Line
- M = Gas Meter
- P = Pump
- BP = Back Pressure Valve
- SWS = Sealed When Shipping
- SUS = Sealed Unless Shipping
- T = Heat Traced Line
- H = Heater
- BL = Buried Line
- ⋈ = Valve
- ↗ = Check Valve
- SC = Sealed Closed Valve
- NC = Normally Closed
- BD = Blowdown Line



The site security plan is on file in DEPI's district office located at 1400 N. State St., Roosevelt, Utah. It can be inspected during office hours, from 6:30 AM thru 3:30 PM, Monday thru Friday..

DOMINION EXPLORATION & PRODUCTION, INC.

RIVER BEND FIELD, UINTA COUNTY

not to scale

TYPICAL FLOW DIAGRAM

ell:

DATE: 10/1/81

**CONDITIONS OF APPROVAL  
FOR THE SURFACE USE PROGRAM OF THE  
APPLICATION FOR PERMIT TO DRILL**

Company/Operator: Dominion Exploration & Production, Inc.  
Well Name & Number: Hill Creek Unit 4-34F  
Lease Number: U-28203  
Location: 564' FNL & 1771' FWL, NE/NW, Sec. 34,  
T10S, R20E, S.L.B.&M., Uintah County  
Surface Ownership: Ute Indian Tribe

**NOTIFICATION REQUIREMENTS**

Location Construction - forty-eight (48) hours prior to construction  
of location and access roads.

Location Completion - prior to moving on the drilling rig.

Spud Notice: - at least twenty-four (24) hours prior to  
spudding the well.

Casing String and  
Cementing - twenty-four (24) hours prior to running  
casing and cementing all casing strings.

BOP and related  
Equipment Tests - twenty-four (24) hours prior to running  
casing and tests.

First Production  
Notice - within five (5) business days after new  
Well begins or production resumes after  
Well has been off production for more  
than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of  
Approval for Notice to Drill and Surface Use Program.

## SURFACE USE PROGRAM

### 1. EXISTING ROADS

- A. See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing roads.
- B. The proposed well site is located approximately 15.8 miles south of Ouray, Utah - See attached TOPO Map "A".
- C. Refer to attached Topographic Map "A" showing labeled access route to location.
- D. Existing roads will be maintained and repaired as necessary. No off lease Right-of-Way will be required.

### 2. PLANNED ACCESS ROAD

- A. The access road will be approximately 1.3 miles in length. See attached TOPO Map "B".
- B. The access road has a 30 foot ROW w/ 18 foot running surface.
- C. Maximum grade on access road will be 8%.
- D. No turnouts will be required.
- E. Road drainage crossings shall be of the typical dry creek drainage crossing type.
- F. No culverts, bridges, or major cuts and fills will be required.
- G. The access road will be dirt surface.
- H. No gates, cattleguards, or fences will be required or encountered.

New or reconstructed roads will be centerlined - flagged at time of location staking.

All travel will be confined to existing access road Right-of-Way. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service Publication: Surface Operating Standards For Oil & Gas Exploration and Development, (1989).

The road shall be upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Upgrading shall include ditching, drainage, graveling, crowning, and capping the roadbed as necessary to provide a well-constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot Right-of-Way will not be allowed.

Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossings nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by run off water shall be prevented by diverting water off at frequent

intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.

As operator, Dominion Exploration & Production, Inc. shall be responsible for all maintenance on cattleguards, or gates associated with this oil and/or gas operation.

3. **LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS OF PROPOSED WELL LOCATION**

A. Abandoned wells – 1\*

B. Producing wells - 3\*

(\*See attached TOPO map “C” for location)

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

A. **ON WELL PAD**

1. Production facilities will be set on location if the well is successfully completed for production. Facilities will consist of wellhead valves, separator and dehy units with meter, 400 barrel vertical condensate tank, and attaching piping.
2. Gas gathering lines - A 4” gathering line will be buried from dehy to the edge of the location.
3. Surface pits – After the well is hydraulically fraced, it will be flowed back into the surface pits. After first production, a 400 barrel tank will be installed to contain produced waste water.

B. **OFF WELL PAD**

1. Proposed location of attendant off pad flowlines shall be flagged prior to archaeological clearance.
2. A 4” OD steel above ground natural gas pipeline will be laid approximately 11,150’ from proposed location to a point in the NW/SE of Section 27, T10S, R20E, where it will tie into Questar Pipeline Co.’s existing line. Proposed pipeline crosses Ute Indian Tribe lands within the Hill Creek Unit, thus a Right-of -Way grant will be required.
3. Proposed pipeline will be a 4” OD steel, welded line laid on the surface.
4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.

If storage facilities/tank batteries are constructed on this lease, the facility/battery or the well pad shall be surrounded by a containment dike

of sufficient capacity to contain, at a minimum, the entire contents of the largest tank within the facility/battery.

The production facilities will be placed on the Northwest end of the location.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within 6 months of installation. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded.

The required paint color is Desert Brown.

5. **LOCATION & TYPE OF WATER SUPPLY**

- A. Water source will be from Water Permit No. 43-10447 located in Sec. 9, T8S, R20E, Uintah County, Utah.
- B. Water will be hauled by a licensed trucking company.
- C. No water well will be drilled on lease.

6. **SOURCE OF CONSTRUCTION MATERIAL**

- A. All construction material for this location and access road will be of native borrow and soil accumulated during the construction of the location.
- B. All construction material will come from Tribal Land.
- C. No mineral materials will be required.

7. **METHODS OF HANDLING WASTE DISPOSAL**

A. METHODS AND LOCATION

- 1. Cuttings will be confined in the reserve pit.
- 2. A portable toilet will be provided for human waste during the drilling and completion of the well. Disposal will be at the Vernal sewage disposal plant.
- 3. Burning will not be allowed. Trash and other waste material will be contained in a wire mesh cage and disposed of at the Uintah County Landfill.
- 4. Produced wastewater will be confined to a lined or unlined pit or storage tank for a period not to exceed 90 days after initial production. After the 90-day period, the produced water will be contained in a tank on location and then disposed of at Ace Disposal, MCMC Disposal or Dominion's RBU 16-19F Disposal Well.

5. All chemicals will be disposed of at an authorized disposal site. Drip pans and absorbent pads will be used on the drilling rig to avoid leakage of oil to the pit.
- B. Water from drilling fluids and recovered during testing operations will be disposed of by either evaporating in the reserve pit or be removed and disposed of at an authorized disposal site. Introduction of well bore hydrocarbons to the reserve pit will be avoided by flaring them off in the flare pit at the time of recovery.

**On Ute Indian Tribe administered land:**

The reserve pit will be constructed so as not to leak, break, or allow discharge. If the reserve pit requires padding prior to lining (due to rocky conditions) felt padding will be used.

**8. HAZARDOUS CHEMICALS:**

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

**9. ANCILLARY FACILITIES**

- A. No airstrips or camps are planned for this well.

**10. WELLSITE LAYOUT**

- A. Refer to attached well site plat for related topography cuts and fills and cross sections.
- B. Refer to attached well site plat for rig layout and soil material stockpile location as approved on On-site.
- C. Refer to attached well site plat for rig orientation, parking areas, and access road.

The reserve pit will be located on North corner of the location. The flare pit will be located downwind of the prevailing wind direction on the East side of the location, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.

The stockpiled location topsoil will be stored between Corners 2 and 4 and around Corner #6 of the location .

Access to the well pad will be from the Southeast.

Corners #2, #6, #8, B & C will be rounded off to minimize excavation.

## 11. FENCING REQUIREMENTS:

All pits will be fenced according to the following minimum standards:

- A. Thirty-nine inch net wire shall be used with at least one strand of barbed wire on top of the net wire. (Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
- B. The net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C. Corner posts shall be cemented and/or braced in such a manner as to keep the fence tight at all times.
- D. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
- E. All wire shall be stretched by using a stretching device before it is attached to the corner posts.

The reserve pit fencing will be on the three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

## 12. PLANS FOR RESTORATION OF SURFACE

### A. PRODUCING LOCATION

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours.

The reserve pit will be reclaimed within 12 months from the date of well completion. Before any dirt work takes place, the reserve pit will be completely dry and all cans, barrels, pipe, fluid, and hydrocarbons, will be removed.

Contact appropriate surface management agency for required seed mixture.

### B. DRY HOLE/ABANDONED LOCATION

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and the BIA will attach the appropriate surface rehabilitation conditions of approval.

13. **SURFACE OWNERSHIP**

Access road: Tribal

Location: Tribal

14. **OTHER INFORMATION**

A. Dominion Exploration & Production, Inc. will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;

-the mitigation measures the operator will likely have to undertake before the site can be used.

-a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wished, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for mitigation costs.

The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

B. As operator, Dominion Exploration & Production, Inc. will control noxious weeds along Right-of-Ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the BIA, or the appropriate County Extension Office. On BIA administered land, a Pesticide Use proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.

C. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on Tribal Lands after the conclusion of drilling operations or at any other time without BIA authorization. However, if BIA authorization is obtained, it is only a temporary measure to allow time to make



arrangements for permanent storage on commercial facilities. (The BIA does not seek to compete with private industry. There are commercial facilities available for stacking and storing drilling rigs.)

**Additional Surface Stipulations**

None

**LESSEE'S OR OPERATOR'S REPRESENTATIVE**

---

**CONTACTS:**

**OPERATIONS**

Mitchiel Hall  
P.O. Box 1360  
Roosevelt, UT 84066  
Telephone: (435) 722-4521  
Fax : (435) 722-5004

**PERMITTING**

Ed Trotter  
P.O. Box 1910  
Vernal, UT 84078  
Telephone: (435) 789-4120  
Fax: (435) 789-1420

All lease or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approval plan of operations, and any applicable Notice to Lessees. Dominion Exploration & Production, Inc. is fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

A copy of the approved APD and ROW grant, if applicable, shall be on location during construction of the location and drilling activities.

**CERTIFICATION:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Dominion Exploration & Production, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date 8-7-2003

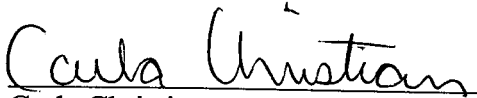
  
Ed Trotter, Agent

Dominion Exploration & Production, Inc.

## SELF-CERTIFICATION STATEMENT

Under Federal regulation, effective June 15, 1988, designation of operator forms are no longer required when the operator is not the 100% record title holder. An operator is now required to submit a self-certification statement to the appropriate office stating that said operator has the right to operate upon the leasehold premises. Said notification may be in the following format:

Please be advised that **Dominion Exploration & Production, Inc.** is considered to be the operator of **Well No. 4-34F, Surface** location in the NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  of **Section 34, T10S, R20E in Uintah County; Lease No. U-28203; Bottom** location is in the NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  of **Section 34-T10S, R20E in Uintah County; Lease No. U-28203** and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Travelers Casualty and Surety Company of America, Bond #76S 63050 0330.



Carla Christian

Regulatory Specialist

# DOMINION EXPLR. & PROD., INC.

HCU #3-34F, #4-34F & #5-34F

LOCATED IN UINTAH COUNTY, UTAH

SECTION 34, T10S, R20E, S.L.B.&M.

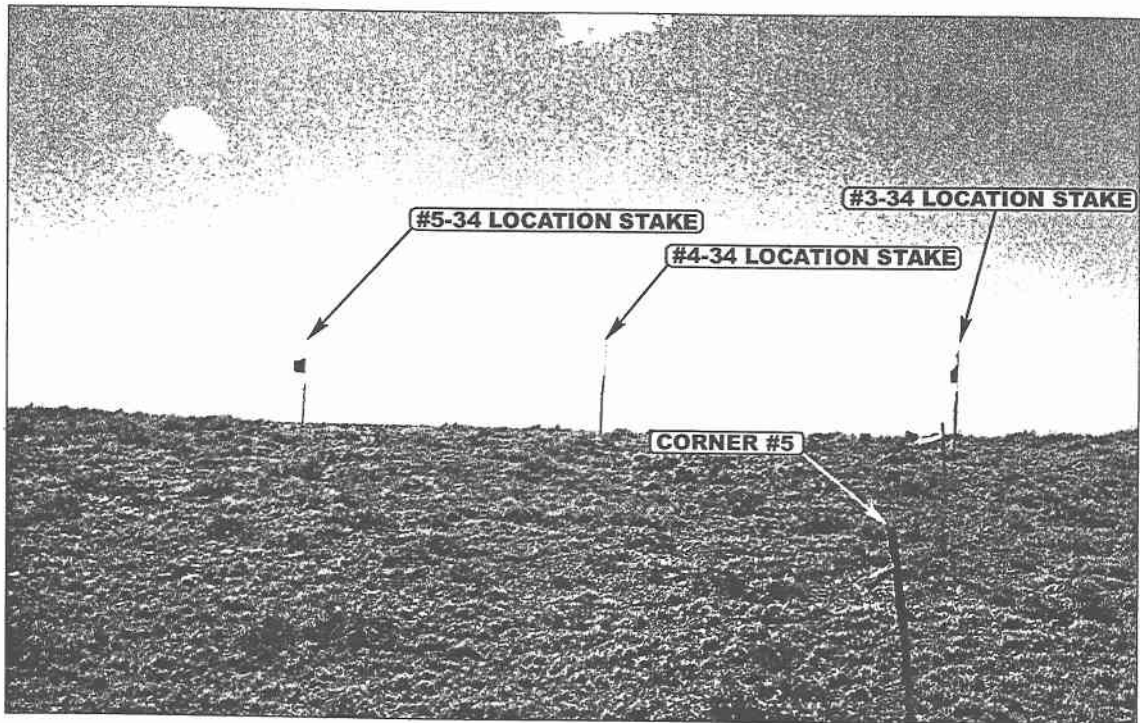


PHOTO: VIEW FROM PIT CORNER "D" TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY

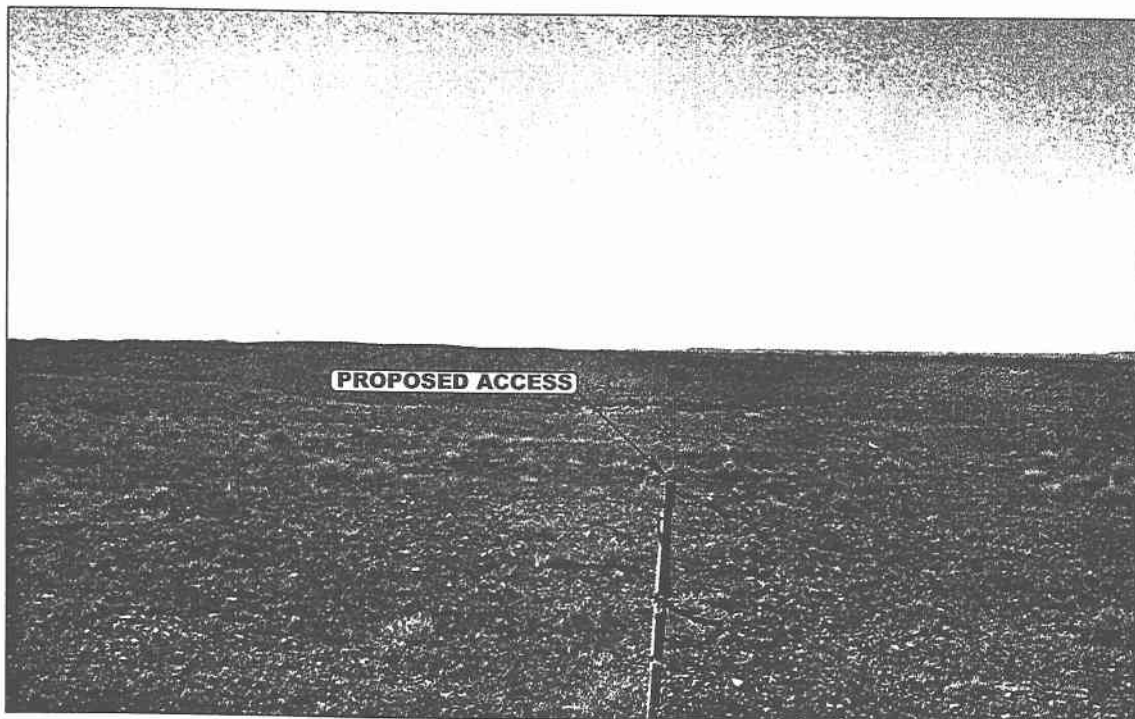


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

9

MONTH

30

DAY

02

YEAR

PHOTO

TAKEN BY: K.K.

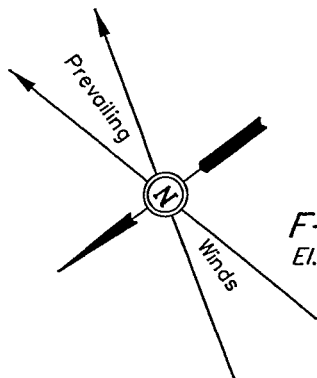
DRAWN BY: P.M.

REV: 5-12-03J.L.G.

# DOMINION EXPLR. & PROD., INC.

## LOCATION LAYOUT FOR

HCU #3-34F, #4-34F & #5-34F  
SECTION 34, T10S, R20E, S.L.B.&M.  
NE 1/4 NW 1/4



Proposed Access Road

SCALE: 1" = 50'  
DATE: 9-26-02  
Drawn By: C.G.  
Revised: 65-5-03

F-1.9'  
El. 24.8'

C-9.9'  
El. 36.6'

Sta. 4+05

C-3.6'  
El. 30.3'

Round Corners  
as Needed

Approx.  
Top of  
Cut Slope

El. 18.8'  
C-0.1'  
(btm. pit)

FLARE PIT

F-4.1'  
El. 22.6'

F-1.4'  
El. 25.3'

C-2.7'  
El. 29.4'

PIPE RACKS

C-2.3'  
El. 29.0'

C-1.3'  
El. 28.0'

F-8.4'  
El. 18.3'

Approx.  
Toe of  
Fill Slope

El. 18.6'  
F-0.1'  
(btm. pit)

20' WIDE BENCH / DIKE

F-0.9'  
El. 25.8'

F-2.5'  
El. 24.2'

F-0.6'  
El. 26.1'

C-2.4'  
El. 29.1'

Sta. 0+00

Elev. Ungraded Ground at #3-34 Location Stake = 5228.0'  
Elev. Graded Ground at #3-34 Location Stake = 5226.7'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

# DOMINION EXPLR. & PROD., INC.

## TYPICAL CROSS SECTIONS FOR

HCU #3-34F, #4-34F & #5-34F  
SECTION 34, T10S, R20E, S.L.B.&M.  
NE 1/4 NW 1/4

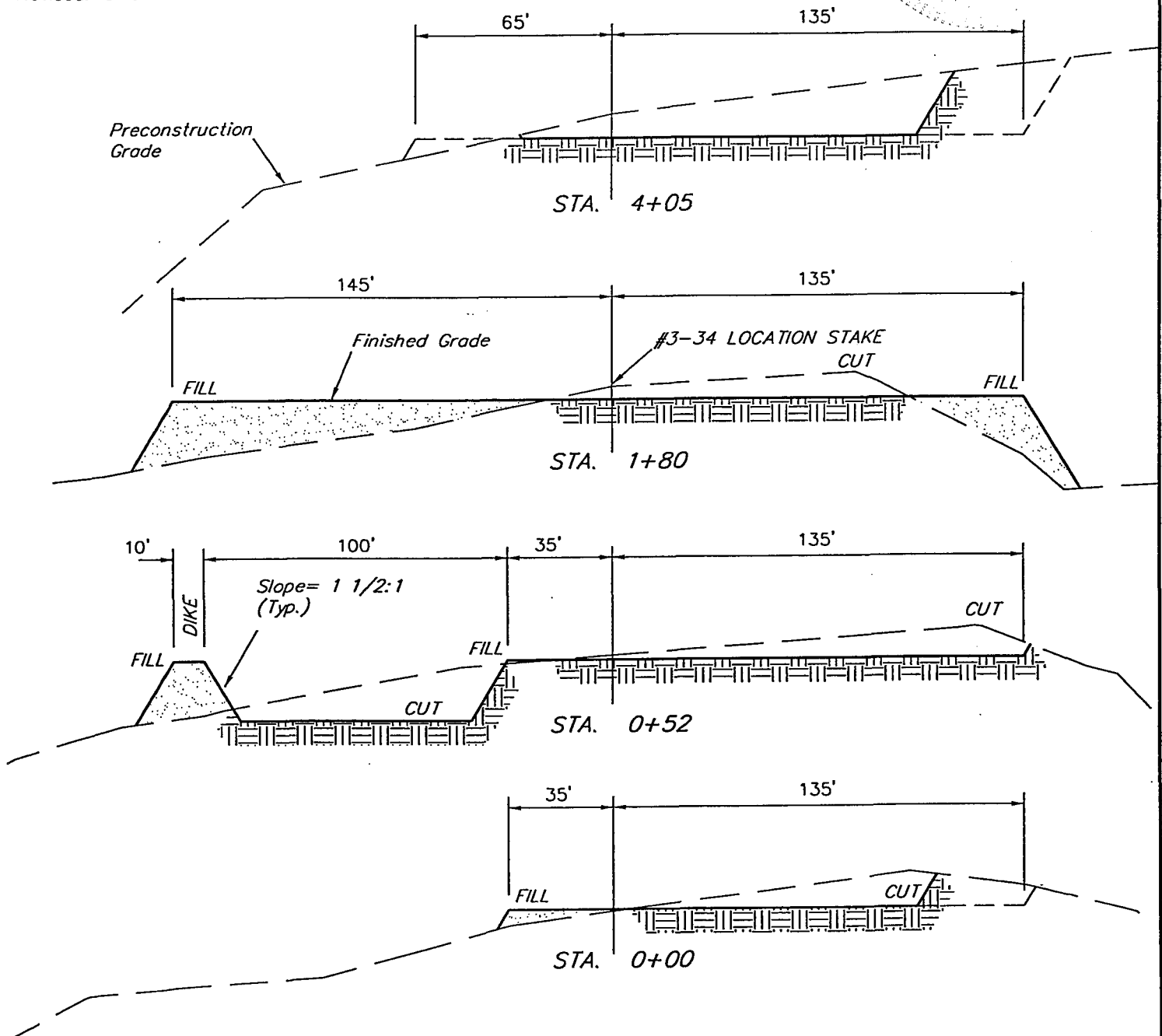
1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 9-26-02

Drawn By: C.G.

Revised: 5-5-03

*[Handwritten Signature]*



### APPROXIMATE YARDAGES

#### CUT

(12") Topsoil Stripping = 3,330 Cu. Yds.

Remaining Location = 5,890 Cu. Yds.

**TOTAL CUT = 9,220 CU.YDS.**

**FILL = 4,140 CU.YDS.**

#### EXCESS MATERIAL AFTER

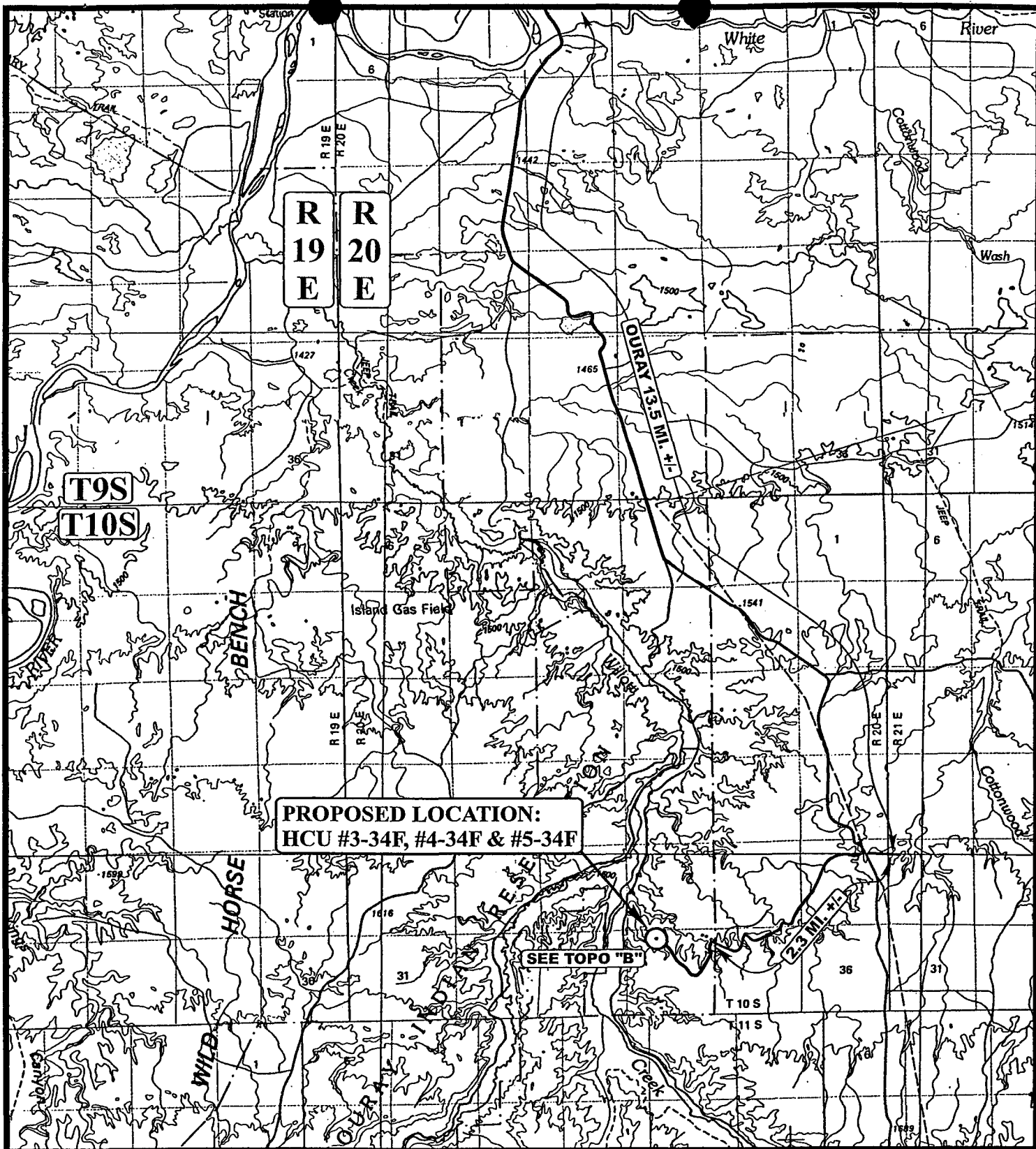
5% COMPACTION = 4,860 Cu. Yds.

Topsoil & Pit Backfill = 4,860 Cu. Yds.  
(1/2 Pit Vol.)

EXCESS UNBALANCE = 0 Cu. Yds.  
(After Rehabilitation)

**UINTAH ENGINEERING & LAND SURVEYING**

85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017



# LEGEND:

○ PROPOSED LOCATION

## DOMINION EXPLR. & PROD., INC.

HCU #3-34F, #4-34F & #5-34F  
SECTION 34, T10S, R20E, S.L.B.&M.  
NE 1/4 NW 1/4



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

9 30 02  
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: P.M. REV: 5-12-03 J.L.G.



R  
20  
E

PROPOSED LOCATION:  
HCU #3-34F, #4-34F & #5-34F

OURAY 16.0 MI. +/-

PROPOSED ACCESS 1.3 MI. +/-

T10S

T11S

**LEGEND:**

————— EXISTING ROAD  
----- PROPOSED ACCESS ROAD



**DOMINION EXPLR. & PROD., INC.**

HCU #3-34F, #4-34F & #5-34F  
SECTION 34, T10S, R20E, S.L.B.&M.  
NE 1/4 NW 1/4



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

9 30 02  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REV: 5-12-03 J.L.G.

**B**  
TOPO



R  
20  
E

PROPOSED LOCATION:  
HCU #3-34F, #4-34F & #5-34F

T10S  
T11S

# LEGEND:

- |                   |                         |
|-------------------|-------------------------|
| ⊗ DISPOSAL WELLS  | ⊗ WATER WELLS           |
| ● PRODUCING WELLS | ● ABANDONED WELLS       |
| ● SHUT IN WELLS   | ● TEMPORARILY ABANDONED |



## DOMINION EXPLR. & PROD., INC.

HCU #3-34F, #4-34F & #5-34F  
SECTION 34, T10S, R20E, S.L.B.&M.  
NE 1/4 NW 1/4



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

TOPOGRAPHIC  
MAP

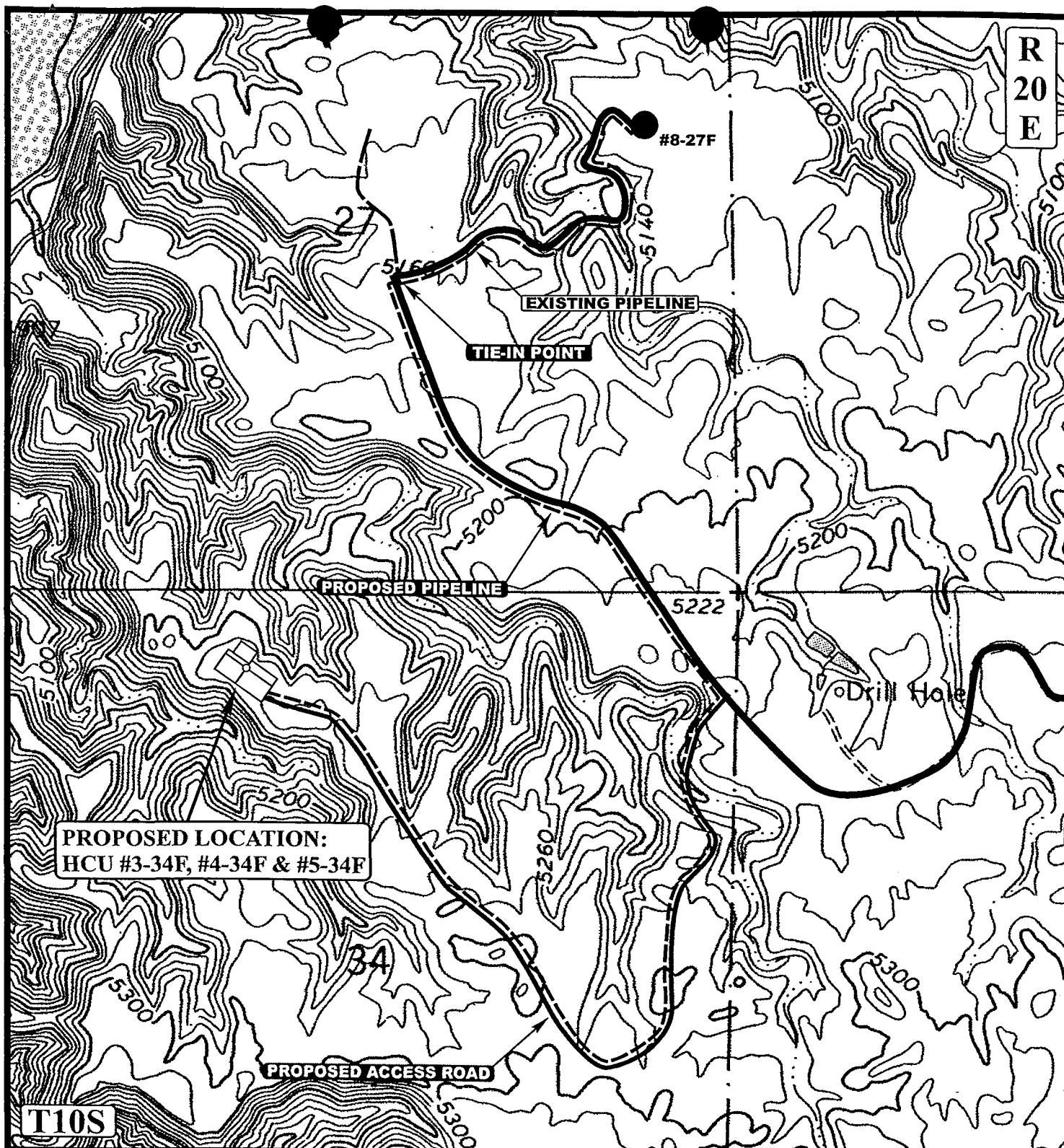
9 30 02  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: P.M. REV: 5-1-03J.L.G.





R  
20  
E



APPROXIMATE TOTAL PIPELINE DISTANCE = 11,150' +/-

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE

**DOMINION EXPLR. & PROD., INC.**

HCU #3-34F, #4-34F & #5-34F  
SECTION 34, T10S, R20E, S.L.B.&M.  
NE 1/4 NW 1/4



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

9 30 02  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: P.M. REV: 5-12-03 J.L.G.

**D**  
TOPO

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/11/2003

API NO. ASSIGNED: 43-047-35138

WELL NAME: HCU 4-34F

OPERATOR: DOMINION EXPL &amp; PROD ( N1095 )

CONTACT: CARLA CHRISTIAN

PHONE NUMBER: 405-749-1300

## PROPOSED LOCATION:

NENW 34 100S 200E

SURFACE: 0564 FNL 1771 FWL

BOTTOM: 0700 FNL 0650 FWL NW/NW

UINTAH

NATURAL BUTTES ( 630 )

LEASE TYPE: 1 - Federal

LEASE NUMBER: U-28203

SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: MVRD

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LATITUDE: 39.90957

LONGITUDE: 109.65340

## RECEIVED AND/OR REVIEWED:

- ☒ Plat
- ☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. 76S630500330 )
- ☒ Potash (Y/N)
- ☒ Oil Shale 190-5 (B) or 190-3 or 190-13
- ☒ Water Permit  
(No. 43-10447 )
- ☒ RDCC Review (Y/N)  
(Date: )
- ☒ Fee Surf Agreement (Y/N)

## LOCATION AND SITING:

- ☐ R649-2-3.
- Unit HILL CREEK
- ☐ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- ☐ R649-3-3. Exception
- ☒ Drilling Unit  
Board Cause No: 197-11  
Eff Date: 8-17-2000  
Siting: 460' from unit boundary
- ☒ R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS:

1-federal approval  
2 Oil SHALE



## United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

August 15, 2003

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2003 Plan of Development Hill Creek Unit,  
Uintah County, Utah.

Pursuant to email between Diana Mason, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following wells are planned for calendar year 2003 within the Hill Creek Unit, Uintah County, Utah.

Api Number	Well	Location
------------	------	----------

(Proposed PZ MesaVerde)

43-047-35130	HCU 11-27F Sec 27 T10S R20E 1599 FSL 1899 FWL	
43-047-35131	HCU 2-29F Sec 29 T10S R20E 0550 FNL 2456 FEL	
43-047-35132	HCU 9-30F Sec 30 T10S R20E 1606 FSL 0528 FEL	
43-047-35133	HCU 10-30F Sec 30 T10S R20E 2107 FSL 2201 FEL	
43-047-35134	HCU 1-31F Sec 31 T10S R20E 0611 FNL 1061 FEL	
43-047-35135	HCU 12-31F Sec 31 T10S R20E 1865 FSL 0609 FWL	
43-047-35136	HCU 5-32F Sec 32 T10S R20E 1618 FNL 0749 FWL	

43-047-35137	HCU 2-33F Sec 33 T10S R20E 0777 FNL 0501 FEL	
	BHL Sec 33 T10S R20E 0700 FNL 1900 FEL	

43-047-35138	HCU 4-34F Sec 34 T10S R20E 0564 FNL 1771 FWL	
	BHL Sec 34 T10S R20E 0700 FNL 0650 FWL	

43-047-35139	HCU 5-34F Sec 34 T10S R20E 0579 FNL 1792 FWL	
	BHL Sec 34 T10S R20E 2000 FNL 0750 FWL	

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

(801) 538-5340 telephone

(801) 359-3940 fax

(801) 538-7223 TTY

www.nr.utah.gov

Michael O. Leavitt  
Governor

Robert L. Morgan  
Executive Director

Lowell P. Braxton  
Division Director

August 18, 2003

Dominion Exploration & Production, Inc.  
14000 Quail Springs Parkway, Suite 600  
Oklahoma City, UT 73134

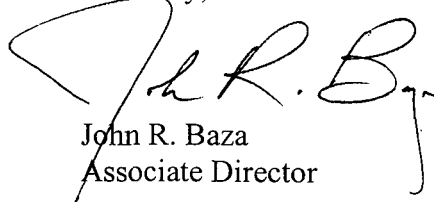
Re: Hill Creek Unit 4-34F Well, Surface Location 564' FNL, 1771' FWL, NE NW, Sec. 34,  
T. 10 South, R. 20 East, Bottom Location 700' FNL, 650' FWL, NW NW, Sec. 34,  
T. 10 South, R. 20 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-35138.

Sincerely,



John R. Baza  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** Dominion Exploration & Production, Inc.  
**Well Name & Number** Hill Creek Unit 4-34F  
**API Number:** 43-047-35138  
**Lease:** U-28203

**Surface Location:** NE NW      **Sec.** 34      **T.** 10 South      **R.** 20 East  
**Bottom Location:** NW NW      **Sec.** 34      **T.** 10 South      **R.** 20 East

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

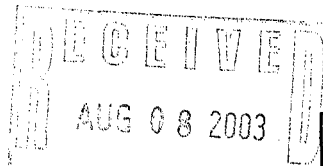
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT



Form approved.  
OMB No. 1004-0136  
Expires: November 30, 2000

008

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. U-28203
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE		6. If Indian, Allottee or Tribe Name Ute Indian Tribe
2. Name of Operator Dominion Exploration & Production, Inc.		7. If Unit or CA Agreement, Name and No. Hill Creek Unit
3a. Address 14000 Quail Spgs Parkway, Okla. City, OK 73134		8. Lease Name and Well No. HCU 4-34F
3b. Phone No. (include area code) 405-749-1300		9. API Number
4. Location of Well (Report location clearly and in accordance with any state requirements.)* At surface 564' FNL & 1771' FWL, NE/NW At proposed prod. zone 700' FNL & 650' FWL, NW/NW		10. Field and Pool, or Exploratory Natural Buttes
14. Distance in miles and direction from nearest town or post office* 15.8 miles South of Ouray		11. Sec., T., R., M., or Bk and Survey or Area 34-10S-20E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 700'	16. No. of Acres in lease 1880	12. County of Parish Uintah
17. Spacing Unit dedicated to this well 40	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1110'	13 State UT
19. Proposed Depth 8,000	20. BLM/BIA Bond No. on file 76S 63050 0330	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5229' GL	22. Approximate date work will start* 15-Feb-04	23. Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Carla Christian</i>	Name (Printed/Typed) Carla Christian	Date August 7, 2003
Title Regulatory Specialist		
Approved by (Signature) <i>Donald Leary</i>	Name (Printed/Typed) Donald Leary	Date 12/05/2003
Title Assistant Field Manager		
Office Natural Resources		

NOTICE OF APPROVAL

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED  
DEC 15 2003  
DIV. OF OIL, GAS & MINING

UDOGM



CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

Company/Operator: Dominion E&P Inc.

Well Name & Number: HCU 4-34F

API Number: 43-047-35138

Lease Number: U-28203

Location: NENW Sec. 34 T. 10S R. 20E

Agreement: Hill Creek WS MV

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

**CONDITIONS OF APPROVAL FOR NOTICE TO DRILL**

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

**A. DRILLING PROGRAM**

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to John Mayers of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment



The BOP and related equipment shall meet the minimum requirements of Onshore Oil & Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 3M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

3. Casing Program and Auxiliary Equipment

As a minimum requirement, the cement behind the production casing must extend 200' above the top of the fresh water identified at  $\pm 5840'$ .

4. Mud Program and Circulating Medium

None

5. Coring, Logging and Testing Program

A cement bond log (CBL) will be run from the production casing shoe to the surface casing shoe and shall be utilized to determine the bond quality for the production casing

**Please submit to this office, in LAS format, an electronic copy of all logs run on this well. This submission will replace the requirement for submittal of paper logs to the BLM.**

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

6. Notifications of Operations

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.  
All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries and tested for meter accuracy at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal Field Office. All meter measurement facilities will conform to Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil & Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, you must contact one of the following individuals:

Ed Forsman (435) 828-7874  
Petroleum Engineer

Kirk Fleetwood (435) 828-7875  
Petroleum Engineer

BLM FAX Machine (435) 781-4410

## EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids

## **SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)**

Dominion Exploration & Production, Inc. (Dominion) will assure the Ute Tribe that any/all contractors and subcontractors have acquired a current Tribal Business License and have updated "Access Permits" prior to construction. All Dominion personnel, contractors and subcontractors will have these permits in their vehicles at all times. Companies that have not complied with this COA will be in violation of the Ute Tribal Business License Ordinance, and will be subject to fines and penalties.

Dominion employees, representatives, and/or authorized personnel (subcontractors) shall not carry firearms on their person or in their vehicles while working on the Uintah & Ouray Indian Reservation.

Dominion employees and/or authorized personnel (subcontractors) in the field will have approved applicable APDs and/or ROW permits/authorizations on their person(s) during all phases of construction.

Dominion will notify the Ute Tribe and Bureau of Indian Affairs (BIA) in writing of any requested modification of APDs or Rights-Of-Way (ROW). Dominion shall receive written notification of authorization or denial of the requested modification. Without authorization, Dominion will be subject to fines and penalties.

The Ute Tribe Energy & Minerals Department shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday. A Tribal Technician is to routinely monitor construction. Dominion shall make arrangements with the Ute Energy & Minerals Department for all monitoring that will exceed regular working hours for Tribal Technicians. A qualified archaeologist accompanied by a Tribal Technician will monitor any trenching construction of the pipeline.

A corridor ROW, 60 foot wide and 11,196 feet long, shall be granted by BIA for the pipeline and for the access road. (See Map D for a description, the route is as submitted in the APDs for the HCU 4-34F and HCU 5-34F wells.) About 4,200 feet of this ROW will parallel existing roads and the rest of the corridor will include the new access road. The constructed, travel width of the access road will be limited to 18 feet. Upon authorization by the Ute Tribe Energy & Minerals Department, the ROW may be wider where sharp curves, deep cuts and fills occur; or, where intersections with other roads are required.

A cattle guard shall be installed where the new access road crosses the reservation boundary fence.

Culverts and diversion ditches will be placed and constructed where needed. Road base gravel will be used where sandy soils make roadways and the drilling location hazardous for access or drilling operations.

Upon completion of the pertinent APD and ROWs, Dominion will notify the Ute Tribe Energy & Minerals Department for a Tribal Technician to verify the Affidavit of Completion.

Production waters, oil, and other byproducts shall not be placed on access roads or the well pad.

All vehicular traffic, personnel movement, construction and restoration operations will be confined to the areas examined and approved and to the existing roadways and/or evaluated access routes.

Dominion will implement "Safety and Emergency Plan" and ensure plan compliance.

Dominion shall stop construction activities and notify personnel from the Ute Tribe Energy & Minerals Department and BIA if cultural remains including paleontology resources (vertebrate fossils) are exposed or identified during construction. The Ute Tribe Department of Cultural Rights and Protection and the BIA will provide mitigation measures prior to allowing construction.

Dominion employees and/or authorized personnel (subcontractors) will not be allowed to collect artifacts and paleontology fossils. No significant cultural resources shall be disturbed.

Dominion will control noxious weeds on the well site and ROWs. Dominion will be responsible for noxious weed control if weeds spread from the project area onto adjoining land.

Reserve pits will be lined with an impervious synthetic liner. A fence will be constructed around the reserve pit until it is backfilled. Prior to backfilling the reserve pit, all fluids will be pumped from the pit into trucks and hauled, to approved disposal sites. When the reserve pits are backfilled, the surplus oil and mud, etc., will be buried a minimum of 3 feet below the surface of the soil.

A closed system will be used during production. This means that production fluids will be contained in leak-proof tanks. All production fluids will be disposed of at approved disposal sites.

Surface pipelines will be constructed to lay on the soil surface. The pipeline portion of the ROW will not be bladed or cleared of vegetation without authorization of the BIA. Surface pipelines shall be welded in place at well sites or on access roads. They shall be pulled into place and assembled with suitable equipment. Vehicles shall not use pipeline ROWs as access roads unless specifically authorized.

Buried pipelines shall be buried a minimum of 3 feet below the soil surface. After construction is completed the disturbed area shall be contoured to blend into the natural landscape and be reseeded between September 15 and November 1 of the year following construction with perennial vegetation seed mixture provided by the BIA or Ute Tribe.

Before the site is abandoned, Dominion will be required to restore the well site and ROWs to near their original state. The disturbed areas will be reseeded with desirable perennial vegetation.

Soil erosion will be mitigated, by reseeding all disturbed areas.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

5. Lease Serial No.  
U-7206
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No.  
HCU 4-34F
9. API Well No.  
43-047-35138
10. Field and Pool, or Exploratory  
NATURAL BUTTES
11. County or Parish, and State  
UINTAH COUNTY, UT

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other
2. Name of Operator  
DOMINION EXPL. & PROD., INC.
- Contact: CARLA CHRISTIAN  
E-Mail: Carla\_M\_Christian@dom.com
- 3a. Address  
14000 QUAIL SPRINGS PARKWAY, SUITE 600  
OKLAHOMA CITY, OK 73134
- 3b. Phone No. (include area code)  
Ph: 405.749.5263  
Fx: 405.749.6690
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 34 T10S R20E NENW 564FNL 1771FWL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The State APD for this well expires August 18, 2004. Dominion is hereby requesting a one year extension.

COPY SENT TO OPERATOR  
Date: 8-25-04  
Initials: CHD

Approved by the  
Utah Division of  
Oil, Gas and Mining  
Date: 08-17-04  
By: [Signature]

RECEIVED  
AUG 06 2004  
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #33958 verified by the BLM Well Information System  
For DOMINION EXPL. & PROD., INC., sent to the Vernal

Name (Printed/Typed) CARLA CHRISTIAN

Title AUTHORIZED REPRESENTATIVE

Signature

(Electronic Submission)

Date 08/03/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

Federal Approval of this  
Action is Necessary

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-35138  
**Well Name:** HCU 4-34F  
**Location:** Section 34-10S-20E, 564' FNL & 1771' FWL  
**Company Permit Issued to:** Dominion Exploration & Production, Inc.  
**Date Original Permit Issued:** 8/18/2003

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

Coula Christian  
Signature

8/3/2004  
Date

**Title:** Regulatory Specialist

**Representing:** Dominion Exploration & Production, Inc.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

☐ Oil Well

☒ Gas Well

☐ Other

2. Name of Operator

Dominion Exploration & Production, Inc.

3a. Address

Suite 600

14000 Quail Springs Parkway, OKC, OK 73134

3b. Phone No. (include area code)

(405) 749-5263

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

564' FNL & 1771' FWL, NE NW, Sec. 34-10S-20E

5. Lease Serial No.

U-28203

6. If Indian, Allottee or Tribe Name

Ute Indian Tribe

7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

8. Well Name and No.

HCU 4-34F

9. API Well No.

43-047-35138

10. Field and Pool, or Exploratory Area

Natural Buttes

11. County or Parish, State

Uintah, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

**TYPE OF SUBMISSION**

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

**TYPE OF ACTION**

☐ Acidize

☐ Altering Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other

APD Expiration.

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The state APD for this well expires 8/18/05. Dominion is hereby requesting a one year extension.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date

By:

COPIES SENT TO OPERATOR  
Date: 8-11-05  
Initials: CMO

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Carla Christian

Title Regulatory Specialist

Signature

Carla Christian

Date 8/02/2005

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

AUG 05 2005

DIV. OF OIL, GAS & MINING



**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-35138  
**Well Name:** HCU 4-34F  
**Location:** Section 34-10S-20E, 564' FNL & 1771' FWL  
**Company Permit Issued to:** Dominion Exploration & Production, Inc.  
**Date Original Permit Issued:** 8/18/2003

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

Carla Christian  
Signature

8/2/2005  
Date

**Title:** Regulatory Specialist

**Representing:** Dominion Exploration & Production, Inc.

**RECEIVED  
AUG 05 2005**

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

## 1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

## 2. Name of Operator

Dominion Exploration &amp; Production, Inc.

3a. Address Suite 600  
14000 Quail Springs Parkway, OKC, OK 731343b. Phone No. (include area code)  
(405) 749-5263

## 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

564' FNL &amp; 1771' FWL, NE NW, Sec. 34-10S-20E

5. Lease Serial No.

U-28203

## 6. If Indian, Allottee or Tribe Name

Ute Indian Tribe

## 7. If Unit or CA/Agreement, Name and/or No.

Hill Creek Unit

## 8. Well Name and No.

HCU 4-34F

## 9. API Well No.

43-047-35138

## 10. Field and Pool, or Exploratory Area

Natural Buttes

## 11. County or Parish, State

Uintah, UT

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

## TYPE OF SUBMISSION

## TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Altering Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☐ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☒ Other

APD Expiration.

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen, directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The state APD for this well expires 8/18/05. Dominion is hereby requesting a one year extension.

## CONDITIONS OF APPROVAL ATTACHED

## 14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Carla Christian

Title Regulatory Specialist

Signature

Carla Christian

Date 8/02/2005

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Matt Baker

Title Petroleum Engineer

Date AUG 05 2005

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

SEP 09 2005

DIV. OF OIL, GAS &amp; MINING

UDOGM

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-35138  
**Well Name:** HCU 4-34F  
**Location:** Section 34-10S-20E, 564' FNL & 1771' FWL  
**Company Permit Issued to:** Dominion Exploration & Production, Inc.  
**Date Original Permit Issued:** 8/18/2003

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☐

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

Carla Christian  
Signature

8/2/2005  
Date

**Title:** Regulatory Specialist

**Representing:** Dominion Exploration & Production, Inc.

# **CONDITIONS OF APPROVAL**

## **Dominion Exploration & Production Inc.**

### **Notice of Intent APD Extension**

**Lease:** UTU-28203  
**Well:** HCU 4-34F  
**Location:** NENW Sec 34-T10S-R20E

An extension for the referenced APD is granted with the following conditions:

---

1. The extension and APD shall expire on 08/18/06
2. No other extension shall be granted.

If you have any other questions concerning this matter, please contact Matt Baker of this office at (435) 781-4490



**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

August 21, 2006

Carla Christian  
Dominion Expl & Prod Inc.  
14000 Quail Springs Parkway  
Oklahoma City, OK 73134

Re: APD Rescinded -HCU 4-34F Sec. 34 T. 10S R. 20E  
Uintah County, Utah API No. 43-047-35138

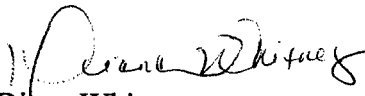
Dear Ms. Christian:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on August 18, 2003. On August 17, 2004 and August 9, 2005, the Division granted a one-year APD extension. On August 21, 2006, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective August 21, 2006.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Whitney  
Engineering Technician

cc: Well File  
Bureau of Land Management, Vernal



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Vernal Field Office

170 South 500 East

Vernal, UT 84078

(435) 781-4400 Fax: (435) 781-4410  
<http://www.blm.gov/utah/vernal>



IN REPLY REFER TO:

3160

UT08300

September 7, 2006

Carla Christian  
Dominion Expl. & Prod., Inc.  
14000 Quail Springs Pkwy, Suite 600  
Oklahoma City, OK 73134

43-047, 35138  
Re: Notification of Expiration  
Well No. HCU 4-34F  
NENW, Sec. 34, T10S, R20E  
Uintah County, Utah  
Lease No. UTU-28203  
Hill Creek Unit

Dear Ms. Christian:

The Application for Permit to Drill the above-referenced well was approved on December 5, 2003. A one (1) year extension of the original APD was requested. The request was reviewed and the extension approved until December 5, 2005. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

*Leslie Wilcken*

Leslie Wilcken  
Land Law Examiner

cc: UDOGM

Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY

RECEIVED

SEP 11 2006

DIV. OF OIL, GAS & MINING